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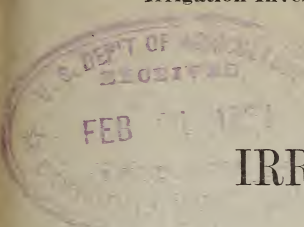
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U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF EXPERIMENT STATIONS,

A. C. TRUE, Director.

Irrigation Investigations, Elwood Mead, Expert in Charge.



IRRIGATION LAWS

OF THE

NORTHWEST TERRITORIES OF CANADA AND OF WYOMING,

WITH DISCUSSIONS BY

J. S. DENNIS, Deputy Commissioner of Public Works, Canada,

AND

FRED BOND, State Engineer of Wyoming, and J. M. WILSON, Agent and Expert,
Irrigation Investigations, Office of Experiment Stations.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1901.

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VIEW OF MAIN CANAL AND HEADGATE, CALGARY IRRIGATION COMPANY, NORTHWEST TERRITORIES, CANADA.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF EXPERIMENT STATIONS,

A. C. TRUE, Director.

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WASHINGTON:
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1901.

LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF EXPERIMENT STATIONS,
Washington, D. C., January 24, 1901.

SIR: I have the honor to transmit and to recommend for publication as Bulletin No. 96 of this Office a paper prepared under the supervision of Prof. Elwood Mead, expert in charge of irrigation investigations, which gives the texts of the irrigation laws of the Northwest Territories of Canada and of Wyoming, with the regulations, forms, and methods of procedure adopted in the administration of these laws and discussions of the principles underlying the laws, and the methods followed in their enforcement, by Hon. J. S. Dennis, deputy commissioner of public works of Canada, and Hon. Fred Bond, State engineer of Wyoming, and J. M. Wilson, agent and expert, irrigation investigations of this Office.

These laws are similar in principle and have proved so satisfactory in practice that it is believed the publication at this time of the information regarding them contained in this bulletin will be of great service to many States of the arid region which are now earnestly endeavoring to make much-needed reforms in their irrigation laws.

Respectfully,

A. C. TRUE,
Director.

Hon. JAMES WILSON,
Secretary of Agriculture.

LETTER OF SUBMITTAL.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF EXPERIMENT STATIONS,
IRRIGATION INVESTIGATIONS,
Cheyenne, Wyo., January 7, 1901.

SIR: I have the honor to submit for publication a paper entitled The irrigation laws of the Northwest Territories of Canada, and of Wyoming, with discussions by Hon. J. S. Dennis, deputy commissioner of public works, Canada, Hon. Fred Bond, State engineer of Wyoming, and J. M. Wilson, agent and expert, irrigation investigations, Office of Experiment Stations.

These papers have been prepared because of a demand for information regarding the Wyoming law and the Canadian Northwest irrigation act, both of which were partially described in Bulletins Nos. 58 and 60, of the Office of Experiment Stations. Through the kindness of the State engineer of Wyoming, this demand for the Wyoming law was met for a time by sending copies of the State engineer's report in which the law was printed. After this edition was exhausted, Bulletins Nos. 58 and 60 were sent in response to these requests, but these publications do not give either law entire nor do they sufficiently explain the policy and methods used to secure permanency and security in water titles.

Several of the Western States are now earnestly seeking for some way to put an end to litigation and controversy over water rights and to provide some simpler, cheaper, and more effective method of establishing titles to streams than is possible through a resort to the courts. The success which has attended the operation of the two laws herein given makes them worthy of study, and the six principles noted as having served as a guide in the framing and interpretation of the Northwest irrigation act are believed to be so sound and fundamental as to be worthy of very general adoption. Both Mr. Bond's and Mr. Dennis's statements of the principles and methods followed in applying these laws are so lucid that we believe the publication of the bulletin will be of service in pointing the way to much-needed reforms in many of the arid States.

Respectfully,

ELWOOD MEAD,
Irrigation Expert in Charge.

Dr. A. C. TRUE, *Director.*

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IRRIGATION LAWS OF CANADA AND WYOMING.

WATER RIGHTS UNDER THE CANADIAN NORTHWEST IRRIGATION ACT.

By J. S. DENNIS,

Deputy Commissioner of Public Works, Canada.

Although the principle of the artificial use of water for irrigation on this continent is much older than the laws relating to land titles, the want of permanency of title to the water used in this way has been one of the greatest drawbacks to modern irrigation development.

There has not been, in the earlier stages of western development, much difficulty in convincing legislative bodies of the necessity for the enactment of such laws as would confer undisputed title upon the owner of a farm, but the wisdom of giving that owner an equally good title to the water for irrigation, without which his farm, if situated in the arid or semiarid portion of the continent, is useless, has not been so readily recognized.

In Canada the necessity for legislation regarding the important subject of the use of water for irrigation has become apparent only during the past few years, and may, in fact, be said to date from the time, within the past decade, when the earlier settlers in the southern and southwestern portions of the Northwest Territories had, by painful experience, proved that farming without the aid of irrigation was a precarious undertaking.

Fortunately, however, the necessary legislation followed almost immediately upon the footsteps of crop failures, and there was practically a clear field, as far as vested rights were concerned, for the introduction of laws upon the subject of water rights. This fact has had much to do with the success and the absence of litigation so far attending the administration of the Canadian irrigation law.

The Canadian law relating to the use of water for irrigation is contained in two enactments, viz, "The Northwest Irrigation Act" and "The Irrigation District Ordinance."

The first-mentioned or parent law is an act first passed by the Dominion Parliament in 1894, and subsequently amended and consolidated, while the irrigation district ordinance is an enactment of the Territorial legislature authorizing the formation of "irrigation districts," which after acquiring a water right under the irrigation act

are empowered to construct the works for the utilization of such water as a municipal undertaking.

For convenience and continuity of narrative these laws are discussed separately in the order given.

Prior to the passage of the Northwest irrigation act there was in Canada no law, except a provincial enactment in British Columbia, which dealt with the diversion of water from its natural channels for use in irrigation, and in framing such a law it was realized that many principles differing materially from common and existing statutory law must be adopted. The method followed in framing the law has had much to do with its successful administration. The act was first drafted to embody such of the principles contained in the irrigation laws of the different irrigable States and Territories of the United States, and legislation upon this subject in other colonies of the British Empire as seemed applicable to local conditions in Canada, and was then submitted during a two months' trip of the writer through all the irrigation States to recognized authorities upon local irrigation laws for criticism. The information thus obtained disclosed weak points and unforeseen conditions in the original draft, and enabled many valuable amendments to be made before the act was finally submitted to Parliament for consideration. Two years' administration of the act indicated further desirable amendments to simplify and extend some of its provisions, and the act was therefore consolidated and amended in 1898.

The Canadian Northwest irrigation act is based upon certain definite principles, which may be briefly stated as follows:

(1) That the water in all streams, lakes, ponds, springs, or other sources is the property of the Crown.

(2) That this water may be obtained by companies or individuals for certain described uses upon compliance with the provisions of the law.

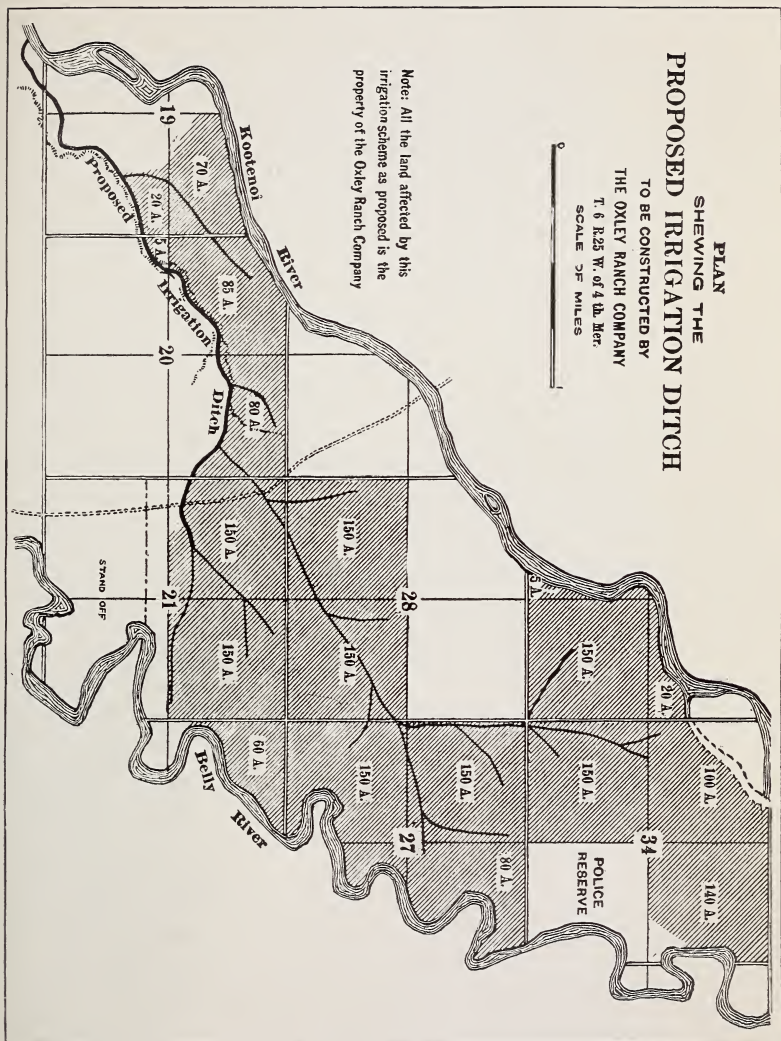
(3) That the uses for which water may be so acquired are "domestic," "irrigation," and "other" purposes, domestic purposes being limited to household and sanitary purposes, the watering of stock, and operation of railways and factories by steam, but not the sale or barter of water for such purposes.

(4) That the company or individual acquiring water for irrigation or other purposes shall be given a clear and indisputable title to such water.

(5) That holders of water rights shall have the protection and assistance of permanent Government officials in the exercise of such rights.

(6) That disputes or complaints regarding the diversion or use of water shall be referred to and settled by the officials of the Government Department charged with the administration of the act, and that decisions so given shall be final and without appeal.

Probably the most satisfactory way to make it clear how the above



principles are worked out in practice will be to deal in detail with a specific case and then to explain the general provisions of the act as they bear upon this case.

We will therefore consider the case of a company formed to construct an irrigation ditch or canal for the reclamation of any area, and trace the undertaking from its inception to completion, so as to illustrate in a practical way the provisions of the law as affecting such undertakings, and it may incidentally be noted that such explanation will cover practically all cases dealt with under the act, the proceedings differing only in minor details for large or small undertakings.

The company having been formed, either under a special act of incorporation or by letters patent under the joint stock companies laws, for the purpose of constructing irrigation works and engaging in the sale of land with water attached thereto for irrigation, or possibly simply to supply water to the present owners of the lands to be irrigated, proceeds to make the necessary surveys to determine the feasibility and approximate cost of their undertaking, and provide the necessary information as to location and character of the works to be constructed and land to be irrigated.

In this connection it may be pointed out that the general irrigation surveys performed by the Government, and the maps issued to illustrate these surveys, serve in a general sense to show whether any specified area of land can be irrigated from a given source, and the company is only called upon to make the actual ditch or canal location required to permit of details of cost, etc., to be figured upon.

In making their surveys, the engineers employed by the company have necessarily to trespass upon lands which do not belong to the company; and to give them a legal right to do this, the company file with the chief engineer of the department of public works for the Territories a general description of their proposed undertaking, and upon payment of a fee of \$3 obtain a license authorizing their engineers to enter upon all public or private lands for the purpose of making necessary surveys connected with the proposed undertaking.

Having completed their surveys and finally elaborated their scheme, the company proceeds to the next step by filing with the commissioner of public works for the Territories a memorial (p. 26), together with certain illustrating plans and profiles, containing full information as to the organization and financial standing of the company, the location, character, and cost of their proposed undertaking, the location and character of the land to be irrigated, and the terms and price to be charged for water supplied for the irrigation of such land. (Pl. I.) The application is duly examined and recorded in the chief engineer's office against the stream or other source from which the water is to be diverted, provided there is water available for appropriation, but if the records show that the supply available from the proposed source

is already granted, or if the examination proves the scheme does not comply with the provisions of the law, the application is refused and applicants notified accordingly; if approved, one copy of the memorial and plans is filed in the department of the interior at Ottawa and the applicants instructed to publish the notice of their application. The company then gives public notice of its having filed the memorial and plans by publication of a notice (p. 39) in five weekly issues of a local newspaper named by the commissioner and file a copy of each issue of the paper containing the notice in the chief engineer's office.

If at the expiration of the publication of the notice referred to no protest against granting the application is received, the chief engineer issues a certificate that the provisions of the law relating to the publication of the notice of application has been complied with, and at the same time makes a recommendation regarding the issue of an authorization for construction of the proposed works to the company and the length of time to be given it to complete the undertaking (p. 27).

The authorization issued to the company empowers it to proceed with the construction of the proposed works, and, if necessary, to expropriate private or public lands required therefor, the time within which such works are to be completed being set forth therein.

Should any protest against granting the application be filed during the period of publication of the notice, the protest is considered and ruled upon, and any changes or amendments ordered are indorsed on the memorial and plans.

Having obtained their authorization, the company proceeds with the construction of the works, subject to inspection of the chief engineer during progress, and to special inspection at any time should complaint be made that the work is not being carried out in accordance with the law and the plan and memorial filed.

Upon completion of the construction of the works connected with the undertaking, or the expiration of the time limit and any extension thereof which may have been granted, a final inspection is made by the chief engineer, who issues a certificate (p. 39) containing a recommendation for the granting of a final license (p. 40) covering the water granted, and this license, upon payment of a fee of \$10, is issued and duly registered or recorded in the irrigation branch of the department of public works against the source from which water is granted. The number which the license bears shows its priority of right against the source, and the certified copy given the company is *prima facie* evidence of its title to the water therein granted in exactly the same manner as a patent or registered deed would be evidence of the ownership of the land or other property conveyed thereby.

The foregoing will serve to indicate in a general way the method of acquiring water rights under the Canadian Northwest irrigation act. It

is now proposed to discuss in a somewhat fuller and more comprehensive manner the provisions of this law in their bearing upon these rights and their use after acquirement.

It may be pointed out in the first place that the law recognizes as a foundation principle that only by an absolute repeal of the common law of riparian right can the use of water for irrigation be successfully introduced, and having enunciated the principle that all water is the property of the Crown, provision is then made for transfer of the title to this water from the Crown to the company or individual desiring to put it to certain uses defined by the law through a well-considered and carefully administered system of registration.

To make the record of rights complete and to prevent disputes regarding vested rights at the time of the introduction of the law, provision was made therein that all rights of a kind similar to those which can be acquired under the act were required to be registered before a specified date, and the wisdom of this provision will be recognized when it is remembered that only by having a complete record of the rights to water can it be hoped to deal intelligently with the supply from such source.

The provisions of the law relating to the form of application to be filed and the information to be given by the maps and plans accompanying the application are worthy of brief reference.

It will be noticed that the memorial, maps, and plans are required to contain full information not only as to the location and character of the works to be constructed, the lands to be irrigated by the water applied for, the character and value of the land to be reclaimed, the price to be charged for water supplied, etc., but also with reference to the financial standing of the applicants.

This full information enables the application to be criticised not only from an engineering standpoint, but also as a business venture, before being approved, and does much to prevent the introduction of "wild-cat" or "boom" irrigation enterprises.

It was recognized in the earliest stages of the administration of the law that the first duty of the Government was to endeavor by a careful system of topographical and hydrographical investigations to determine the actual supply of water available from each source, and to accomplish this the Canadian irrigation surveys were inaugurated and carried on systematically each year. One of the main features of the work undertaken is to endeavor to determine by careful measurements and gagings the actual supply of water available from each stream or other source for irrigation so as to know what there is to grant, and by limiting the records against any source to the available supply prevent the possibility of waste of money resulting from the construction of canals and ditches, for which the owners can not hope to obtain water without taking what rightly belongs to someone else.

This phase of the administration of the law is dealt with somewhat as follows:

Each stream, or in fact any source from which water may be diverted, is given a place in a register containing, as it were, a debit and credit account for water, the credit side being filled up from measurements and gagings of the supply at low water, high water, and flood discharge, and the debit side being a charge against this supply of rights to such water acquired under the act. A glance at this register at any time shows the exact balance between available supply and recorded rights, and permits of immediate settlement of the question of whether there is water available to meet the requirements of each application as it is filed for approval.

This system practically delegates to the officials administering the act the power to prevent the probability of future disputes between the holders of water rights by refusing to approve any application which it is considered might tax any source of supply beyond its capabilities, and thus cause friction between recorded rights, and although this method of dealing with the subject may seem drastic, it is held to be reasonable that the Crown should not undertake to dispose of more water than it can deliver, and it will, I think, be admitted that the introduction of this system in the earlier days of irrigation development will tend to prevent waste of money in endeavoring to enforce or protect fictitious water rights by long-drawn-out legal contests.

The provisions of the law regarding public notice of the filing of applications for water rights and for the consideration and summary disposal by the minister of protests filed, have resulted in clearing many undertakings in their inception of objections and disputes, which, if left for settlement until later on, would certainly have resulted in much annoyance, and, in some cases, serious inconvenience in the way of lawsuits.

A fruitful cause of trouble with all undertakings necessitating the taking of land for the purposes of right of way is the question of the area to be taken and the price to be paid therefor.

Under the Canadian irrigation law the possession of an authorization puts the holder in a position to expropriate the land necessary for right of way, and makes the ruling of the minister final as to the area necessary, the question only of the price being settled by arbitration. These provisions also are designed to prevent the ever present lawsuit.

Having referred to the provisions of the law affecting the project during its inception and progress, we may pass to a consideration of the provisions bearing upon the title to the water obtained upon completion of the undertaking.

The document conveying this title is termed a license and would perhaps be better designated as a "water patent," but while it conveys an absolute title from the Crown it differs from the ordinary land patent

in the material sense of being subject to cancellation for failure to comply with certain conditions of the law after its issue, while the land patent is subject to cancellation only for cause precedent to its issue. The term "license" was therefore thought the better one, and a consideration of its wording will demonstrate that the title conveyed is good and the limitations thereto wise.

It will be noticed in the first place that the license purports to transfer a definite quantity of water for the irrigation of a defined area, but that the transferee, to maintain his title, must live up to the provisions of the law. These three points are worthy of separate notice.

The definite quantity of water conveyed settles at once the question of the limits of the right, and no loophole is left for advancing a claim that the right is defined by size of canal or ditch, or area of land to be irrigated. The stage at which water is granted is also indicated, and the means of determining the stage settled, so that disputes as to when a licensee is entitled to take water can not arise, and at the same time under the system of granting licenses against the three stages, viz, low water, high water, and flood stage, it is possible to grant titles to all the flow of water available for diversion without prospect of a dispute between the holders of such titles.

The second point referred to opens up a subject which has been prolific of much discussion and controversy in all irrigation countries, which may be summarized as follows:

Shall water diverted for irrigation be an appurtenant of the land for which it is originally diverted, or a movable right available for use anywhere?

The license issued under the Canadian irrigation law answers this question in the plainest terms by providing that the water granted is granted for the irrigation of a defined area, as shown by the memorial, maps, and plans of record, and not as a right to be used anywhere the licensee may see fit.

In this connection it may not be out of place to refer to some criticism of the above provisions of the Canadian law contained in the report on "Water Rights on the Missouri River and its Tributaries," contained in Bulletin No. 58 of the Office of Experiment Stations, U. S. Department of Agriculture.

The author of that report, in speaking of the amount of the appropriation authorized by the Canadian law, states: "The amount of the appropriation is limited by the capacity of the works, which is determined by an inspection ordered by the minister of the interior, and the report of this inspector is made conclusive. This is believed to be a mistake. The experience of the arid States of this country has shown that making the ditch builder the appropriator of water does not afford sufficient security to the user. It is not the ditch builder who makes the principal return nor whose interests are of enduring moment;

it is the man who reclaims the land and makes his home thereon who should receive the first consideration of the lawmakers who deal with the subject. Making ditch builders or canal companies the appropriators of water threatens to put users of water from those canals under a perpetual mortgage to them."

The foregoing criticism is, it is thought, based upon a wrong interpretation of the Canadian law. That law, in common with the laws of both Wyoming and Nebraska, provides that the application to appropriate water must describe the ditch or canal through which the water is to be diverted and the lands to be irrigated by the water granted.

The Canadian law provides (section 24 of the act) for an inspection by the chief engineer upon the expiration of the time granted for construction of the ditch or canal and the issue of a certificate by him that the completed works are capable of carrying a stated quantity of water, and upon this certificate the license is based; but the law further provides (section 26) that should it be subsequently found that the works will not carry the quantity of water granted, the right shall be limited to the quantity which the works will carry. These provisions must be interpreted in connection with other provisions of the law and the regulations prescribed thereunder.

In the first place, it should be noted that water granted is granted for the irrigation of a specified area, and, as already explained, the applicant for the water is required to file his contracts or agreements with the users owning this land, if it is not his own property, before the license issues.

It should also be explained that under the Canadian law the irrigation season and the duty of water are both fixed by the minister, and the amount of water granted is based upon the ratio between the acreage to be irrigated and the water provided by the "duty" as being necessary to irrigate that area. The quantity of water which a user (or, more properly speaking, a definite area) is entitled to get being fixed at the time of the final inspection by the chief engineer, he must be guided by the contracts and agreements filed in issuing his certificate, and if his inspection proves that the ditch or canal as constructed will not carry a sufficient quantity of water to enable the owner to fill his contracts in accordance with the duty of water laid down by the regulations, he has to see that contracts for lands which can not be supplied are canceled before issuing a certificate upon which the water for lands that can be served is granted. This system, it is thought, provides the most ample protection to the user, and although the ditch or canal owner is admitted to be the appropriator, his appropriation is limited strictly to the proper quantity required for a specified area, and the owners of that area protected in their right as acquired through the appropriation filed by the ditch owner.

The provision of the law for revision of the right acquired can be



FLUME AND BRIDGE, CALGARY IRRIGATION COMPANY, NORTHWEST TERRITORIES, CANADA.

brought into force only as an appeal from the first certificate issued as to capacity of the canal or ditch, and the procedure for a second inspection and certificate can not damage the rights of the user, as the law further provides (section 35) that if a licensee can not supply all the water agreed to be delivered, each user must get his proportionate share, enforcement of this provision being exacted by a heavy fine or imprisonment, or both. Under the Wyoming law the certificate of appropriation is based upon the evidence given by the appropriator and a recommendation from the superintendent of the water division within which the works are situated, based upon an inspection made by a qualified person. This certificate authorizes the appropriation of a definite quantity of water for the irrigation of a defined area. Under the Nebraska law the appropriation is limited to a definite quantity of water for a specified area reclaimed on a fixed date, and provision is made for the proper record of a certificate defining the quantity of water duly appropriated.

Both of the latter laws differ from the Canadian law in procedure only, as the area of land reclaimed is made the basis of the water granted, but under the Canadian system it is further provided that the ditch through which the water for irrigation of this area is to be carried must be of sufficient size to carry this water, and the right is attached to the land as an easement through such ditch.

The provision in the Canadian law for cancellation of the license illustrates one of the marked points of difference between that law and American laws relating to irrigation. Under most of the latter laws the forfeiture of rights for nonuser or failure to comply with other provisions of the law must be enforced by a legal process which is capable of long and vexatious delays. The Canadian law, on the other hand, having provided for the issue of a document which is *prima facie* evidence of title, also provides the simplest and most effective machinery for cancellation of the title for cause, and the result is that while the owners of water rights who live up to the provisions of the law receive ample protection in the enjoyment of these rights, without having to resort to the courts to have them defined or enforced, such a thing as maintaining a right to water unless its beneficial use is continued is not possible.

The provisions of the law relating to priority of right among the holders of licenses and for the summary settlement of disputes between licensees will be readily understood by reference to the particular section of the irrigation act relating to this matter, which reads as follows: "Licensees shall have priority among themselves according to the number of their licenses, so that each licensee shall be entitled to receive the whole of the supply to which his license entitles him before any licensee whose license is of a higher number has any claim to a supply; and if a complaint is made to the minister, or to an officer

authorized by him to receive such complaints, that any licensee is receiving water from a source of supply to which another licensee is entitled by virtue of priority of right, and that the licensee having such priority of right is not receiving the supply to which he is entitled, some officer to be named by the minister or the officer to whom complaint is made, as the case may be, shall inquire into the circumstances of the case, and if he finds that there is ground for the complaint shall cause the head gates of the ditch or other works of the licensee who is receiving an undue supply of water to be closed, so that the supply to which the other licensee is entitled shall pass and flow to his works."

Having dealt with the procedure relating to the initial acquirement of water rights, it may be of interest to note briefly the system and forms adopted for transfer of title to the whole or any portion of the right.

Provision is first made for the transfer of the whole right covered by an application during the period of acquirement or before the issue of the license. This provision is necessitated by the fact that change of ownership may occur during the period granted by the authorization for completion of the construction of the works for the utilization of the water applied for.

After the issue of the license it may be wholly or partly transferred by use of the simple form printed on the back, and the record of this transfer having been effected, upon payment of a small fee the transferee obtains a new license in his own name. This simple system of transfer resembles the Torrens land title system in force in the Northwest Territories, and has the further advantage that the license is *prima facie* evidence of title.

The matter of the title of those who purchase water for irrigation from the holder of a license is important to the actual irrigator, and is dealt with in the following manner. It will be noted that the holder of a license may come within any of the following classes:

(a) The individual who acquires a license for water for the irrigation of his own land only.

(b) The individual or possibly association of individuals as a partnership who acquires a license for the irrigation of its own and neighbor's lands.

(c) The company duly incorporated for the purpose of acquiring a license for water for the irrigation of large areas, of which, in many cases, it may own only a portion.

(d) The irrigation district organized under a special law for the irrigation of land as a municipal undertaking.

All these cases are dealt with on the same basis up to the time of the issue of the license, and the applicants must before that time have proved their title to the land for which the water is granted. The

character of the title to be proved differs, however, materially in each case.

In cases which come under the heading *a* the applicant is required to hold the land to be irrigated in fee simple, or under a homestead entry, or lease from the Crown, or an agreement for purchase with one of the railways or other land-owning companies.

The title in class *b* is somewhat more extended, and it is sufficient for the applicants to prove title to the land they personally hold under titles outlined in class *a* and to file agreements for the use of water with the owners of the additional lands to be irrigated from their ditch or canal.

The larger projects comprised under class *c* are again dealt with under a different system. The corporate bodies comprised within this class are given, by the law bringing them into existence, the right to acquire water for the irrigation of large areas without it being necessary that they should own any large portion of this area. In practice it has so far been found in Canada that as a business venture irrigation companies are not a success unless the company owns the larger part of the land to be irrigated and can realize from this land the increased value resulting from bringing it under a ditch or canal. In dealing, however, with these cases it is required that during the period granted them for completion of their scheme they should record agreements for the sale or use of water covering the total area to be irrigated. The form so far used in these cases is given on page 44. Examination of this form will, it is thought, show, if read in conjunction with the provisions of the law and regulations, that the purchaser of a water right from a company has a good title to the water purchased, and is granted the same protection in the enjoyment of his title as is given the holder of the license constituting the basis of the title.

As bearing upon the terms of these agreements it may be pointed out that the regulations prescribed under the act provide, among other things, that the agreements must be recorded in the same central office of record from which the license issues;

The duty of water which governs the quantity to be delivered is fixed, not by the irrigation company or water user, but by the Government;

The water delivered under the agreement must be measured by a device approved by the Government;

The irrigation season is fixed by the Government;

A company attempting to enter into an agreement to supply more water than its canal will supply shall be punished by a heavy fine; and that

Disputes between the company and user as to quantity of water delivered are settled by Government officials without recourse to the courts.

The title of users of water under class *d* is again dealt with in a manner different to cases comprised within classes *a*, *b*, and *c*.

In this instance the district requiring a license is simply holding it in trust for the landowners comprising the district, and as under the irrigation district law, referred to more fully further on, all the irrigable land in the district must use and pay its share of the water tax, no special agreements are entered into between the district and owners of irrigable land, and before issuing his certificate for the license the chief engineer has only to satisfy himself that the works as constructed will carry sufficient water to enable all the irrigable land in the district to get its share, the title of this land to the water being defined by the law creating the district.

There are in addition to the foregoing many other general provisions of the Canadian irrigation law which are deserving of consideration, but the main features bearing upon the title to water acquired under the act have been dealt with, and the remaining points may be noted by those interested in the matter from a consideration of the law itself.

Before concluding, however, it is necessary to refer to the second law mentioned in the opening paragraphs of this discussion, the North-west Irrigation District Ordinance.

This enactment has in view the introduction of irrigation works as municipal undertakings, and is based on the principle that an irrigation canal constructed for the reclamation of any area should be held in common by the owners of the lands to be irrigated.

The ordinance provides that, by petition addressed to the lieutenant-governor in council, a majority of the owners in any specified area may secure the erection of such area into an irrigation district, and proceed to elect from among themselves a board of trustees to manage the affairs of the district. Notice of the application for erection of the district must be given in a local newspaper and proper evidence furnished as to the good faith of the signers of the petition and the genuineness of their signatures.

The district being properly formed, they then proceed to make application under the irrigation act for a water right in exactly the same manner as an individual or company, and their application is subjected to the same scrutiny to determine the feasibility of the scheme and the ability of the district to carry it out.

If the application for a water right is granted, the district proceeds to raise the necessary money for the construction of the proposed works by the sale of debentures based upon the land comprised within the district as security, but must first obtain the approval of the lieutenant-governor in council to the proposed debenture issue. Having secured the necessary money, the works are constructed under the same conditions as to inspection and approval by the chief engineer as are enforced with regard to private or other corporate irrigation works, and, after completion, the canal is managed and maintained by

an annual tax upon the irrigable land in the district sufficient to pay the cost of management and maintenance, and provide a sinking fund to redeem the debentures.

It should be noted in connection with this law that the same scrutiny and care are exercised in the formation of the district and the acquirement and exercise of its water right that are exercised with regard to private or other corporate rights acquired under the irrigation law.

There is one provision of the irrigation district ordinance which is deserving of special notice because its enforcement has had the result of enabling irrigation districts in Canada to dispose of their debentures at a price above par, and it effectually prevents anything like speculation in the organization of districts, or investment in their debentures except as purely interest-bearing securities. The provisions referred to provide a practical guarantee by the Government of the debentures which a district is authorized to sell, and contain the law, unique on this continent, that if the landowners of the district neglect to pay the tax imposed for the management and maintenance of their irrigation works, and to provide a sinking fund to pay off the debenture indebtedness, the Government pays these taxes and takes the lands.

The practical result of this provision is that the district is absolutely sure of its revenue for management and maintenance, and the debenture holder of his interest and principal, while those who might be disposed to seek the formation of irrigation districts in the speculative hope of obtaining cheap land have very little encouragement to indulge in such enterprises.

Copies of the Northwest irrigation act, the regulations prescribed under the act, and many of the forms used in administering the act, which have not been specially referred to herein, are appended hereto, and in concluding what has been a very fragmentary discussion of a very large subject, it may be well to state that while the Canadian laws relating to irrigation are in their infancy or formative stage and possibly weak in many respects, the guiding principle and aim of these laws and their administration is "security of title and the use of the available water supply for irrigation in such a manner as to bring the greatest and most lasting benefits to the greatest number."

THE NORTHWEST IRRIGATION ACT.

61 VICTORIA, CHAPTER 35.

AN ACT to amend and consolidate the Northwest irrigation acts of 1894 and 1895. [Assented to 13th June, 1898.]

Her Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:

Short title. 1. This act may be cited as the northwest irrigation act, 1898.

Interpretation. 2. In this act, unless the context otherwise requires—

Minister. (a) The expression “minister” means the minister of the interior;

Department. (b) The expression “department” means the department of the interior at Ottawa;

Commissioner. (c) The expression “commissioner” means the commissioner of public works for the Northwest Territories;

Chief engineer. (d) The expression “chief engineer” means the chief engineer and surveyor of the department of the public works for the Northwest Territories;

Dominion land surveyor. (e) The expression “Dominion land surveyor” means a surveyor duly authorized, under the provisions of the Dominion lands act, to survey Dominion lands;

Company. (f) The expression “company” means any incorporated company the object and powers of which extend to or include the construction or operation of irrigation or other works under this act, or the carrying on thereunder of the business of the supply or the sale of water for irrigation or other purposes, and includes any person who has been authorized or has applied for authority to construct or operate such works or carry on such business, or who has obtained a license under section 11 of this act, and also includes any irrigation district incorporated under an ordinance of the Northwest Territories;

Works. (g) The expression “works” means and includes any dykes, dams, weirs, flood gates, breakwaters, drains, ditches, basins, reservoirs, canals, tunnels, bridges, culverts, cribs, embankments, headworks, flumes, aqueducts, pipes, pumps, and any contrivance for carrying or conducting water or other works which are authorized to be constructed under the provisions of this act;

Duty of water. (h) The expression “duty of water” means the area of land that a unit of water will irrigate, which unit is the discharge of one cubic foot per second;

Licensee. (i) The expression “licensee” means any person or company who is granted a license in accordance with the provisions of this act.

Application. 3. This act shall apply to the Northwest Territories, except the provisional districts of Yukon, Mackenzie, Franklin, and Ungava.

Right to use waters. 4. The property in and the right to the use of all the water at any time in any river, stream, water course, lake, creek, ravine, cañon, lagoon, swamp, marsh, or other body of water shall, for the purposes of this act, be deemed to be vested in the Crown, unless and until and except only so far as some right therein, or to the use thereof, inconsistent with the right of the Crown, and which is not a public right or a right common to the public, is established, and, save in the exercise of any legal right existing at the time of such diversion or use, no person shall divert or use any water from any river, stream, water course, lake, creek, ravine, canyon, lagoon, swamp, marsh, or other body of water otherwise than under the provision of this act.

Rights of grantee of Crown lands. 5. Except in pursuance of some agreement or undertaking existing at the time of the passing of this act, no grant shall be hereafter made by the

Crown of lands or of any estate, in such terms as to vest in the grantee any exclusive or other property or interest in or any exclusive right or privilege with respect to any lake, river, stream, or other body of water, or in or with respect to the water contained or flowing therein, or the land forming the bed or shore thereof.

Right to use waters may be acquired only under this act.

shall be acquired by any riparian owner or any other person by length of use or otherwise than as it may be acquired or conferred under the provisions of this act, unless it is acquired by a grant made in pursuance of some agreement or undertaking existing at the time of the passing of this act.

Persons already holding a right must obtain license.

water, shall obtain a license under this act before the first day of July, one thousand eight hundred and ninety-eight.

If license is not obtained within stated time.

of this act; otherwise such rights or works, and all the interest of such person therein, shall, without any demand or proceeding, be absolutely forfeited to Her Majesty, and may be disposed of or dealt with as the governor in council sees fit.

Application for license.

such license shall be made in the same manner as for other licenses under this act, and the like proceedings shall be had thereon and like information furnished in connection therewith.

Application for water rights which are vested in the Crown.

ance with the provisions of this act shall have precedence, except applications under section seven, according to the date of filing them with the commissioner.

Water rights classified.

purposes, which shall be taken to mean household and sanitary purposes and the watering of stock, and all purposes connected with the working of railways or factories by steam, but shall not include the sale or barter of water for such purposes; second, irrigation purposes, and third, other purposes.

Rights of riparian proprietors.

or other source of supply of whatever water he requires for domestic purposes.

Preliminary work by licensee.

obtain from the chief engineer a license to do the necessary preliminary work in connection with the location of such works; and after he obtains such license he may, with such assistants as are necessary, enter into and upon any public or private lands to take levels, make surveys, and do other necessary work in connection with such location, doing no unnecessary damage.

Entering lands.

Form of application. **11.** Every applicant for license under this act, except as hereinafter provided, shall file with the commissioner the following documents:

Memorial. (a) A memorial, in duplicate, on forms provided by the commissioner, in which the applicant shall set forth his name, residence, and occupation, his financial standing, the source from which water is to be diverted, the point of diversion, the probable quantity of water to be used, the size and character of the works to be constructed, the area and location of the land to be irrigated, the value of such land in its present state, including improvements, the probable number of consumers, and the rate, if any, to be charged for water sold; but if the applicant

If applicant is an incorporated company.

is an incorporated company, the memorial shall also set forth the names of its directors and officers and their places of residence, the date of its incorporation, the amount of the company's subscribed capital, the amount of its paid-up capital, the proposed method of raising further funds, if needed, and the purposes for which the company is incorporated;

Application to cross road allowance or surveyed road; general plan.

(b) An application, on forms provided by the commissioner, for the right to construct any canal, ditch, reservoir, or other works referred to in the memorial, across any road allowance or surveyed public highway,

which may be affected by such works;

(c) A general plan, in duplicate, on tracing linen, drawn to a scale of not less than one inch to a mile, showing the source of supply, the position of the point of intake, the location of the main canals or ditches, the tract of land to be irrigated, the name of the owner of each parcel of land crossed by the canal, or ditch, or by any reservoir or other works connected therewith, or to be irrigated therefrom, and the position and area of all ponds, reservoirs, and basins intended to be constructed for the storage of water; and

Detail plan.

(d) A plan, in duplicate, on tracing linen, showing in detail all head works, dams, flumes, bridges, culverts, or other structures to be erected in connection with the proposed undertaking.

Additional plans in the case of certain canals.

12. In the case of all ditches or canals carrying more than twenty-five cubic feet of water per second, in addition to the above information, the applicants shall furnish the following maps or plans, in duplicate:

(a) A longitudinal profile of the ditch, showing the bottom and the proposed service water line, the horizontal scale being not less than one inch to four hundred feet, and the vertical scale not less than one inch to twenty feet;

(b) A plan showing cross sections at a sufficient number of points to fully illustrate all the different forms which the ditch when constructed will take, particularly on side hills or elsewhere where any portion of the water is to be conveyed in fill. When water is to be conveyed in cut, there shall also be shown on this plan cross sections at points where the shortest horizontal distance from either side of the bottom of the ditch to the surface of the ground is less than double the bottom width of the ditch at that point. This plan shall be drawn on a horizontal and vertical scale of one inch to twenty feet;

Plans of works in connection with reservoirs.

(c) Plans of any dams, cribs, embankments, or other works proposed to obstruct any river, stream, lake, or other source of water supply, or in order to create a pond, reservoir, or basin of water anywhere, or which may have that effect, prepared on a longitudinal scale of not less than one inch to one hundred feet, and for cross sections on a scale of not less than one inch to twenty feet, and showing what material is intended to be used and how placed in such works. The timber, brush, stone,

brick, or other material used in such works shall be shown in detail to a scale of not less than one inch to four feet;

Plans of grounds under reservoirs. (d) Cross-section maps or plans showing the surface of the ground under such pond, reservoir, or basin of water, and also the surface of the water proposed to be held therein; the horizontal scale of the said maps or plans shall be not less than one inch to one hundred feet, and the vertical scale shall be not less than one inch to twenty feet, and a sufficient number of lines of levels shall be shown, so that the contents of the pond, reservoir, or basin of water may be accurately determined. If the maps or plans show the levels by contour lines, they shall be on a scale sufficiently large that the contour lines shall show a vertical distance between them not exceeding one foot. The maps or plans shall have sufficient information to show clearly the property likely to be effected by the creation of such ponds, reservoirs, or basins of water, and the manner in which affected, and shall show in detail, on a scale of not less than one inch to four feet, the proposed manner of controlling and drawing off the water from any such pond, reservoir, or basin.

Memorials and plans to be open for inspection. 13. The memorials and plans filed as above prescribed, or a true copy thereof, shall be open for examination by the public at all times in the department and at the office of the commissioner at Regina.

Filing elsewhere. 14. In any case in which he thinks proper, the minister may direct that a copy of the memorial and plans shall be filed in such other place or with such other official or person as he names for that purpose, and such copy also shall be open to public inspection.

Public notice of application. 15. Public notice of the filing of the memorial and plans shall forthwith be given by the applicant in some newspaper published in the neighborhood, to be named by the commissioner, not less than once a week for a period of thirty days, within which time all protests against granting the rights applied for shall be forwarded to the minister, and such notice shall contain a statement of the nature of the rights applied for, and the general character and location of the proposed works.

Protests to be considered by minister. 2. The minister, after considering all protests filed, may authorize, as hereinafter provided, the construction of the proposed works, with such changes or variations as he deems necessary.

Memorial and plans to be examined and approved. 16. The memorial and plans filed with the commissioner, as herein provided, shall be examined by the chief engineer, and, after having been approved by him, one copy shall be forwarded for record purposes in the Department; and upon the receipt of such memorial and plans, properly approved, together with a certificate that the proper notice of the filing of such memorial and plans has been published, and that permission has been granted by the commissioner to construct such works across road allowances or surveyed public roads affected thereby, the minister may authorize the construction of the proposed works, fixing in such authorization a term within which the construction of the works is to be completed.

Changes in plans to be filed. 2. Any changes and variations ordered by the minister regarding the plans of the proposed works must be filed by the applicant in the office of the commissioner, and shall form a portion of the record open for public inspection.

Deviation from plans. 3. No material deviation from the plans filed shall be made without permission, and any question arising as to whether any deviation is material or otherwise shall be decided by the chief engineer, or such other officer as the minister designates.

Filing of plans may be waived in certain cases.

17. In the case of applications for water for domestic or irrigation purposes the minister may, if he sees fit, waive the necessity for filing the plans required by section eleven of this act, and may require the applicants to file a memorial only; but he may order that such memorial shall contain all the information necessary to a full and complete understanding of the rights applied for.

Inspection of works.

18. Any works authorized under this act shall, if the minister so determines, be constructed, subject to inspection during construction by the chief engineer, or any other officer to be named by the minister; and the cost of such inspection, or such portion thereof as the minister decides, shall be borne by the person or company constructing such works.

Inspection on application of proprietor near works.

2. Should any person residing on or owning land in the neighborhood of any works, either completed or in course of construction, apply to the minister in writing, desiring an inspection of such works, the minister may order an inspection thereof.

Deposit to be made by applicant.

3. The minister may require the applicant for inspection to make a deposit of such sum of money as the minister thinks necessary to pay the expenses of an inspection, and in case the application appears to him not to have been justified, may cause the whole or part of the expenses to be paid out of such deposit.

Enforcing payment of costs.

4. In case the application appears to the minister to have been justified, he may order the person or company to pay the whole or any part of the expenses of the inspection, and such payment may be enforced as a debt due to Her Majesty.

Works to be made secure.

5. Upon any inspection under the provisions of this section the minister may order the person or company to make any addition or alteration which he considers necessary for their security to or in any works of the person or company, and noncompliance with such order may be dealt with in the same manner as is provided with respect to an order of the minister under section forty of this act.

6. Provided, that where under section seventeen the minister waives the necessity for plans this section shall not apply.

When work may be commenced.

19. The person or company, immediately after the receipt of the authorization, may proceed with the construction of the works authorized, and for the purposes of such construction shall have the powers conferred by the railway act upon railway companies, so far as the same are applicable to the undertaking of the person or company and are not inconsistent with the provisions of this act or with

Powers under c. 29 of 1888.

the authority given to the person or company, the provisions conferring such powers being taken for this purpose to refer to any work of the person or company where in the said act they refer to the railway.

Time for commencing works limited.

20. The construction of any work authorized under this act shall be commenced not later than two months after the date of the authorization, unless such two months expire between the first day of November and the first day of May following, in which case the time of commencement shall not be later than the first day of May following, and shall proceed continuously until sufficiently completed to supply water to all applicants within the area described in the authorization, provided there is sufficient water available for that purpose; and the minister, or such officer as he designates, shall be the sole arbiter as to whether the work is being prosecuted with sufficient vigor.

Extension of time in case of disaster.

2. Should any unforeseen disaster intervene to prevent the construction or completion of the works within the time limited, or for any other reasons

which he deems sufficient, the minister may authorize an extension of time for the commencement or completion of the works.

Forfeiture of right if works are not completed within time limited.

such forfeiture constructed or acquired may be taken over and operated or disposed of by the minister in the manner and upon the terms hereinafter provided.

21. Lands required for the works of the person or company, as shown by the maps and plans filed, in whomsoever they are vested, whether in Her Majesty or in any person or company under this act, or in any railway company, or in any other person whomsoever, or any interest in or right or privilege with regard to such land which is so required, may be taken and acquired by the person or company; and to this end all the provisions of The Railway Act which and so far as they are applicable to such taking and acquisition, shall apply as if they were included in this act, the minister of the interior and the department of the interior being substituted for the minister of railways and canals and the department of railways and canals, respectively, wherever in the provisions of the said act the latter minister and department are referred to: *Provided*, That the minister of the interior may impose such terms and conditions as he thinks proper in the public interest in connection with the acquisition under this section of any lands which are vested in any person or company under this act, or in any railway company, or of any interest in such lands or any right or privilege affecting such lands.

Compensation for damages.

ages to lands arising out of the construction or maintenance of the works of the person or company or the exercise of any of the powers granted to the person or company under this act.

Maps, etc., to be certified and filed.

son or company for right of way or for any purpose in connection with the construction and maintenance of their works, must be signed and certified correct by a duly qualified Dominion land surveyor. Such maps, plans, and books of reference shall be prepared in duplicate, and one copy shall be filed in the office of the commissioner and the other registered by the applicant in the land titles office for the registration district within which the lands affected by such surveys are situated.

Disputes as to lands taken.

shall, in case of dispute, be the sole arbiter as to the area of land which may be taken by the person or company without the consent of the owner for any purpose in the construction or maintenance of their works.

Inspection of works on completion and issue of certificate for license.

chief engineer or such other officer as the minister appoints; and a certificate shall be issued by the chief engineer and be forwarded to the department, setting forth that the works have been completed in accordance with the application, that the right of way for the works has been obtained, that agreements have been entered into for the supply of water for the irrigation of lands which are not the property of the applicant, and that the works as constructed are capable of carrying and utilizing a stated quantity of water.

License. 2. Upon receipt of such certificate the minister shall issue a license to the applicant for the quantity of water to which he is entitled, and such license shall be recorded in the office of the commissioner at Regina.

Priority of right. 25. Licensees shall have priority among themselves according to the number of their licenses, so that each licensee shall be entitled to receive the whole of the supply to which his license entitles him before any licensee whose license is of a higher number has any claim to a supply;

Settlement of disputes. and if a complaint is made to the minister, or to an officer authorized by him to receive such complaints, that any licensee is receiving water from a source of supply to which another licensee is entitled by virtue of priority of right, and that the licensee having such priority of right is not receiving the supply to which he is entitled, some officer, to be named by the minister or the officer to whom complaint is so made, as the case may be, shall inquire into the circumstances of the case, and, if he finds that there is ground for the complaint, shall cause the headgates of the ditch or other works of the licensee who is receiving an undue supply of water to be closed, so that the supply to which the other licensee is entitled shall pass and flow to his works.

Licensee's rights limited by capacity of works. 26. When any works for carrying water are not of sufficient capacity to carry the quantity of water acquired by their owner, his exclusive right shall be limited to the quantity which such ditch, flume, or other contrivance is capable of carrying; and in case of dispute as to such quantity the minister may order an inspection of the works; and the report and finding of the inspecting officer as to the capacity thereof shall, for the purpose of this section, be final and conclusive.

Cancellation of license and reservation of water right in certain cases. 27. When the land to be irrigated by the water granted to a licensee is land for which letters patent from the Crown have not been issued, being held by the licensee under a homestead or other conditional entry or a lease in accordance with the provisions of the Dominion land act, or under an agreement to purchase such land, the license for such water shall be canceled upon receipt by the minister of a certificate of the cancellation of such homestead or other conditional entry, lease, or sale agreement; but the water right necessary for the irrigation of such land may be reserved for such time as the minister determines, and may be disposed of, together with all works connected therewith, to the next occupant or purchaser of such land, upon such terms and conditions as the minister determines; and the new license issued for such water shall have the same number and hold the same priority of right as the original or canceled license.

Information to be afforded to inspecting engineer. 28. Every person and every company, and the officers and directors thereof, shall afford to any inspecting officer such information as is within their knowledge and power in all matters inquired into by him, and shall submit to such inspecting officer all plans, specifications, drawings, and documents relating to the construction, repair, or state of repairs of the works, or any portion thereof.

Proof of his authority. 2. The production of instructions in writing signed by the minister or his deputy or the secretary of the department of the interior shall be sufficient evidence of the authority of such inspecting officer.

Penalty for obstructing him. 29. Every person who willfully obstructs an inspecting officer in the execution of his duty shall be liable, on summary conviction, to a penalty not exceeding twenty dollars, or to imprisonment for a term not exceeding two months, with or without hard labor, or to both.

Penalty for obstructing engineer or surveyor.

tions in connection with any work authorized under this act, is guilty of an offence, and liable, on summary conviction, to a penalty not exceeding twenty dollars, or to imprisonment for a term not exceeding two months, or to both.

Penalty for improper diversion by any person.

this act, or who takes or diverts therefrom any greater quantity of water than he is entitled to, is guilty of an offence, and liable, upon summary conviction, to a fine not exceeding five dollars per day or fraction of a day for each unit or fraction of a unit of water improperly diverted, or to imprisonment for a term not exceeding thirty days, or to both and upon indictment to a fine not exceeding five dollars per day or fraction of a day for each unit or fraction of a unit of water improperly diverted, or to imprisonment for a term not exceeding thirty days, or to both.

Penalty for improper diversion of water.

able on summary conviction by a fine not exceeding five dollars per day or fraction of a day for each unit or fraction of a unit of water so diverted.

Disputes as to quantity of water diverted.

that purpose and for the purposes of this section; the report and finding of such officer as to the quantity diverted shall be final and conclusive.

Forfeiture of licensee's rights by waste or non-user.

charge may be inquired into by him or by any person or officer appointed by him for that purpose; and the minister, if he deems just and proper, may by order declare a forfeiture of the license, and the license so ordered or declared to be forfeited shall be canceled and shall cease and determine.

Disposal of surplus water to applicants.

ing therefor for irrigation purposes and tendering payment for one month in advance at the regular prices.

Payment by applicant.

2. Persons so applying shall pay an amount equal to the cost and expense of the works required to convey the surplus water to them, or shall themselves construct such works; and until this is done the delivery of surplus water need not be made.

Quantity of water to which applicant is entitled.

the use of so much of the surplus water as such works have the capacity to carry.

Limitation.

4. Nothing in this section shall be construed to give to any person acquiring the right to use surplus water any right to said surplus water when it is needed by the licensee for the purposes authorized, or to waste or sell or dispose thereof after being used by him, or shall prevent the original owners from retaking, selling, or disposing thereof in the usual or customary manner after it has been so used as aforesaid.

30. Every person who interrupts, molests, or hinders in his work any engineer or Dominion land surveyor engaged in making surveys or levels, or in other operations

31. Every person who willfully, without authority, takes or diverts any water from any river, stream, lake, or other waters, or from any works authorized under

32. No licensee shall divert more water than the quantity actually granted by his license, and any licensee so doing shall be guilty of an offence punishable on summary conviction by a fine not exceeding five dollars per day or fraction of a unit of water so diverted.

2. In case of dispute as to the quantity of water diverted, the minister may order an inspection of the works of the licensee by an officer named by him for

33. When any licensee abandons or ceases to use or wastes any waters to which his license entitles him, and any charge of such abandonment or ceasing to use or wasting waste water is made to the minister, such

34. Any licensee shall dispose of any surplus water flowing in his works which is not being utilized or used for the purposes authorized to any person apply-

3. When the necessary works have been constructed and the payment or tender herein provided for has been made, the applicant shall be entitled to

No discrimination in prices after stated time.

convey the water to the user, discriminate between the users of such water regarding the price thereof.

If supply of water is insufficient.

2. If from any cause the whole amount of water agreed to be supplied by a licensee is not available, then each user shall have furnished to him by the licensee so much water as shall bear to the available water the same proportion as his usual supply bears to the whole amount agreed to be furnished.

Penalty. 3. Any licensee violating these provisions shall be guilty of an offence against this act and liable upon summary conviction to a fine not exceeding one thousand dollars for each and every such offence, or to imprisonment for a period not exceeding two months, or to both.

Storage of water.

36. The minister may grant to any licensee the right to store for irrigation purposes during periods of floods or high water, or during those portions of the year when water is not required for irrigation purposes, any water not being used during such periods.

Utilization for the purpose of existing works.

2. Should there be any works for the carriage of water which are not being utilized to their full capacity by their owner, and which can with advantage be utilized to carry the whole or any portion of the water desired to be stored any portion of the distance it is required to be so carried or conducted, without interfering with the use made of the said works by their owner, then the said works shall be placed at the disposal of the licensee desiring to so use it; and if the parties can not agree upon the compensation to be paid for such service, the minister may fix the rate to be paid therefor.

Highway crossings.

37. Any person or company constructing any works under the provisions of this act shall, during such construction, keep open for safe and convenient travel all public highways theretofore publicly traveled as such, when they are crossed by such works, and shall, before water is diverted into, conveyed, or stored by any such works extending into or crossing any such highway, construct, to the satisfaction of the minister, a substantial bridge, not less than fourteen feet in breadth, with proper and sufficient approaches thereto, over such works; and every such bridge and the approaches thereto shall be always thereafter maintained by such person or company.

Unit of measurement.

38. Under this act the discharge of one cubic foot of water per second shall be the unit of measurement of flowing water, and the cubic foot or acre-foot the unit of measurement of quantity. The acre-foot is equivalent to forty-three thousand five hundred and sixty cubic feet.

Annual return by company.

39. Companies obtaining a license under this act shall, on or before the thirty-first day of January in each year, make a return to the minister, attested by the oath of its president and secretary, for the year ending the thirty-first day of December preceding, showing:

- The amount expended on construction;
- The amount expended on repairs;
- The amount received from shareholders;
- The amount of bonds issued;
- The amount received for water supplied for irrigation;
- The amount received from other sources;
- The amount of dividend declared and paid;
- The amount of capital stock authorized;
- The amount of capital stock subscribed;
- The amount of capital stock paid up to date;

The amount of bonded indebtedness;
 The amount bonds sold for;
 The rate of interest bonds bear;
 The amount of indebtedness other than bonds, and the rate of interest such indebtedness is bearing;
 The cost of management;
 A statement of the works, and their extent and character;
 The number of miles of canals, ditches, etc.;
 The number of users;
 The number of acres actually under irrigation;
 The number of acres of irrigable land in the system;
 The names of officers and employees;
 The proposed extensions during ensuing years and the acreage to be covered thereby;
 Such other data as the governor in council sees fit to order.

Copy of by-laws. 2. Attached to such annual return shall be a copy of the by-laws of the company, showing all amendments thereto during the year covered by the said return.

Exception. 3. The returns required by this section may be waived by the minister in the case of a private person supplying water solely to himself.

Order by minister in case of complaint against licensee. 40. When a complaint, under oath of the complainant and of at least one witness, is made to the minister or the commissioner by a consumer of water who has paid his rates, that a licensee who has engaged or is under obligation to supply him with water is failing to do so, or is failing to keep his works in proper condition, the minister or some person or officer appointed by him for the purpose may make immediate inquiry and take all necessary steps to ascertain the truth of the complaint, and, if he considers the complaint established, may order and direct that the licensee shall take forthwith such action as he considers necessary in order as far as possible to remove the cause of complaint.

Reference to judge. 2. If the licensee fails to obey such order, the minister shall forthwith issue a certificate to that effect, reciting all the facts, which certificate being presented to the judge of the supreme court for the judicial district within which such works lie, the judge shall hear and determine the matter in a summary manner, and shall order the licensee to proceed with all dispatch to take such measures as he considers necessary in the premises; and refusal or neglect to obey any order made by a judge under this section may be treated and punished as contempt of court, and such other proceedings may be had and taken thereon as in the case of noncompliance with any other mandatory order of the said court or a judge thereof.

Amalgamation of companies. 41. The governor in council may authorize two or more companies, whose works are contiguous, to unite and form one company, with a view to providing increased water supply and extending their works, when he is satisfied that the holders of more than fifty per cent of the capital stock of each company are in favor of the union, that users dependent upon the water supply will not be injured, and that the companies to be united have the necessary financial means for carrying out the proposed undertaking, the same particulars being furnished to the governor in council as are required to be furnished upon an application for authorization to construct works under this act; and public notice of the authorization of the united companies and their proposed works shall be given in the manner prescribed in the case of an application under section fifteen.

Minister may issue summons.

regulations to be framed under it, summon before him any person by subpoena, examine such person under oath, and compel the production of papers and writings;

Penalty for disobeying it.

and for neglect to obey such summons or refusal to give evidence, or to produce the papers or writings demanded of him, the minister or the person authorized may, by warrant under his hand, order the person in default to be imprisoned in the nearest common jail as for contempt of court, for a period not exceeding fourteen days.

Before whom affidavits may be taken.

42. The minister or anyone specially authorized by him may, when he deems it necessary for the satisfactory carrying out of the provisions of this act or the regulations made thereunder, may be taken before the chief engineer, or any persons specially authorized by the minister to take them, or any other persons authorized to take affidavits in the Northwest Territories; and the minister may require any statement called for under this act, or under any such regulation, to be verified by oath, affidavit, affirmation, or declaration.

Minister may order surveys, etc.

43. All affidavits, oaths, solemn declarations, or affirmations required to be taken under this act or any regulations made thereunder, may be taken before the chief engineer, or any persons specially authorized by the minister to take them, or any other persons authorized to take affidavits in the Northwest Territories; and the minister may require any statement called for under this act, or under any such regulation, to be verified by oath, affidavit, affirmation, or declaration.

44. The minister may take such steps as he deems necessary at any time to secure a complete or partial survey of the sources of the water supply for irrigation and other purposes, with an estimate of the extent and location of irrigable lands, and of the site or sites suitable for ponds, basins, and reservoirs for water storage, and may reserve lands forming such sites from general sale and settlement and dispose thereof by sale or lease to be utilized for purposes within the purview of this act. He may also take such steps as he thinks necessary to protect the sources of water supply and to prevent any act likely to diminish or injure the said supply.

High-water marks, analysis of water, etc.

45. The minister may from time to time authorize the establishing in rivers, streams, lakes, and other waters, water gages for computing the approximate volume and discharge of waters, the placing of high-water marks on rivers and streams, lakes, and other waters when in flood, the taking of steps for securing analyses of the water of rivers, streams, lakes, and other waters, and the adopting of such other measures and proceedings for promoting the beneficial use of water, and for controlling and regulating the diversion and the application thereof as he finds necessary and expedient and as are consistent with the provisions of this act.

Expropriation of works by Government.

46. The governor in council may, if in the public interest it is at any time deemed advisable so to do, take over and operate or otherwise dispose of the works of any licensee authorized under this act: *Provided*, That compensation shall be paid for such works at their value—such value to be ascertained by reference to the exchequer court, or by arbitration, one arbitrator to be appointed by the governor in council, the second by the licensee, and the third by the two so appointed, or in case these can not agree as to the third arbitrator, by the exchequer court—and in estimating such value the court or the arbitrators may take into account the expenditure of the licensee and interest on such expenditure, and the value of its property, works, and business: *Provided also*, That no person who at such date is using the water of the said works shall be deprived of the quantity of water he is entitled to: *Provided further*, That in any such case the governor in council shall have due regard to the claims to consideration of any persons who have prepared or have in course of preparation any land to be supplied with water by the works taken over.

Proviso.

Proviso. its property, works, and business: *Provided also*, That no person who at such date is using the water of the said works shall be deprived of the quantity of water he is entitled to: *Provided further*, That in any such case the

Proviso.

Proviso. governor in council shall have due regard to the claims to consideration of any persons who have prepared or have in course of preparation any land to be supplied with water by the works taken over.

By-laws of company.

47. The by-laws and regulations of companies operating under this act shall not contain anything contrary to the

true intent and meaning of this act, and shall be subject to revision and approval by the minister; and no tariff of charges for water furnished by any company shall come into operation until it has been approved by the minister.

Issue of bonds by company. **48.** Any company authorized under this act may issue bonds, debentures, or other securities to the amount of its subscribed capital, or double the amount of its paid-up capital, whichever is the smaller amount.

Acquisition of lands by company. **49.** Any company authorized under this act may acquire land by purchase or lease for improvement by irrigation, and shall dispose thereof within fifteen years after its acquisition, otherwise such land shall revert to the Crown; excepting how-

Exceptions. ever such lands as are actually under cultivation or are being used for farming, gardening, stock raising, dairying, horticulture, tree planting, and forestry: *Provided*, That the lands so excepted do not comprise more than ten per cent of the total area of land brought under irrigation by the company.

Company may construct telegraph and telephone lines, etc. **50.** Any company authorized under this act may for the purposes of its undertaking construct or acquire electric telegraph and telephone lines or any other contrivances for the transmission of messages through or

along wires, rods, tubes, or other appliances, and may acquire any land necessary for the construction and operation of such lines or contrivances, and the lands necessary to be taken and acquired for this purpose may be acquired under the provisions of section 21 of this act.

General powers of minister. **51.** The minister may—
Define the manner in which the measure of water shall be arrived at;

Define the duty of water according to locality and soil;

Define the portion of the year during which water shall be supplied for irrigation;

Fix the fee or charge to be paid for licenses issued under this act, which fees or charges may be varied according to the capital employed or volume of water diverted;

Regulate the extent of diversion from rivers, streams, lakes, or other waters;

Regulate the passage of logs, timber, and other products of the forests through or over any dams or other works erected in rivers, streams, lakes, and other waters under the authority of this act;

Regulate from time to time the water rates which may be charged by licensees, and the publication of tariffs of rates;

Prescribe forms to be used in proceedings under this act;

Impose penalties for violations of any regulation made under the authority of this act, which penalties shall in no case exceed a fine of two hundred dollars or three months' imprisonment, or both;

Regulate the manner in which water is to be supplied to persons entitled thereto, whether continuously or at stated interval, or under both systems;

Authorize some person or officer, whose decision shall be final and without appeal, to decide in cases of dispute as to what constitutes surplus water as mentioned in this act;

Make such orders as are deemed necessary, from time to time, to carry out the provisions of this act according to their true intent, or to meet any cases which arise and for which no provision is made in this act; and further, make any regulations which are considered necessary to give the provisions of this act full effect.

Publication of regulations. **52.** All regulations made and forms prescribed by the minister under this act shall be published in the Canada Gazette and shall be laid before both houses of Parliament within the first fifteen days of the session next after the date thereof.

Application of act to companies now existing.

forty-eight are concerned.

Exemption. 54. The provisions of sections forty-one, forty-eight, and forty-nine of this act shall not apply to any irrigation district incorporated under an ordinance of the Northwest Territories.

Repeal. 55. The Northwest irrigation act, being chapter thirty of the statutes of eighteen hundred and ninety-four, and chapter thirty-three of the statutes of eighteen hundred and ninety-five, in amendment thereof, are hereby repealed.

RULES, REGULATIONS, AND FORMS PRESCRIBED BY THE MINISTER OF THE INTERIOR, UNDER THE PROVISIONS OF SECTION 51 OF THE NORTHWEST IRRIGATION ACT.

MEASUREMENT OF WATER.

The measurement of the discharge of any stream, made for the purposes of determining the quantity of water available for licenses, authorizing the diversion of water therefrom, or to settle disputes between the holders of such licenses, shall be effected as follows:

The area of the actual water cross section, at time of measurement, shall be determined by careful measurement of the total width of stream, and by soundings under the line of cross section at sufficiently frequent intervals to give a close approximation of the contour of bottom of the stream.

The velocity of the stream shall be determined by measurement with any approved make of current meter, which must have been previously rated at the government rating station at Calgary, these measurements being taken at such intervals along the line of cross section as will enable the velocity to be determined for each subsection between soundings.

In streams of not more than three feet in depth, surface and bottom velocities must be measured, or the meter may be moved slowly, during time of observation, from bottom to top and vice versa. In streams of more than three feet in depth, middepth readings of current meter may be taken, the resulting discharge being corrected by necessary factor for velocities thus determined.

The flow of water into any irrigation ditch or canal shall be determined by careful measurement of the cross section of the rating flume, constructed as hereinafter provided, and of the velocity by current meter of the water flowing therein, at extreme low water, high water, and flood-discharge stages of water in the source of supply, these heights of water being fixed by the marking on the gage rod placed in the said rating flume of such ditch or canal, as hereinafter provided. The flow of water between low, high, and flood stages of water shall be determined by a table showing flow of water at these heights, and for each six inches marked on the gage rod, which table, in the form of a certificate, signed by the inspecting officer, shall be issued for each ditch or canal, and shall accompany the license hereinafter provided for.

The quantity of water supplied to consumers by any person or company having a license for the use of water for irrigation shall be measured by water meter, measuring flume, measuring weir, spill box, or any other device for the measurement of the water, but such water meter, measuring flume, measuring weir, spill box, or other device must be first approved and sanctioned by the minister of the interior, or by some officer appointed by him, who shall issue a certificate authorizing the person or company to use such device.

The volume of water in any lake, pond, or reservoir, or other body of still water, shall be measured by careful survey of the outline of such body of water to determine its superficial area, and measurement of the depth of water at sufficiently frequent intervals to give a correct contour of the bottom of such lake, pond, or reservoir, so that the contents thereof may be accurately calculated. The flow of water into or out of any reservoir shall be measured by determination of the area of the cross section of channel of inflow or discharge and of the velocity of the water flowing therein by current meter.

The discharge of spring shall be determined by causing all the water flowing therefrom to discharge into a vessel or reservoir of known contents, and noting the time taken to fill such vessel or reservoir, or by measurement of cross section of the channel carrying flow of such spring, as near as possible to its head, and determination of velocity of flow therein with current meter.

DUTY OF WATER.

The duty of water, or the ratio between a given quantity of water and the amount of land it will irrigate, shall be one hundred acres for each cubic foot of water per second flowing constantly during the irrigation season, and all applications for water to irrigate any given area, and the division of the available water supply among applicants therefor shall be made upon the basis of this duty of water.

LICENSES.

Whenever any company or person, applying for a license or authorization under the provisions of the act, has complied with all the requirements thereof, and has completed the construction of the works authorized, an inspection of the works shall be made by an officer named by the minister, who shall determine the capacity of such works and certify that they have been completed in accordance with the provisions of the act.

Upon receipt of such certificate, and of a fee of ten dollars, to be paid by the company or person constructing such works, the minister of the interior shall issue to such company or person a license in the form given in the schedule hereto, which license shall be registered by the company or person to whom it is issued in the registry office in and for the district within which the lands affected by the system covered by such license are situated, by producing the same, or an exemplification thereof, to the registrar, with a true copy sworn to by any person who has compared the same with the original, and the copy shall be filed with the registrar.

RATING FLUME AND GAGE RODS.

Every irrigation ditch or canal shall be provided by the owners thereof with a rating flume, which is to be constructed in the ditch or canal not less than one hundred nor more than eight hundred feet between the headgate thereof, such flume to be built in accordance with plans approved by some officer appointed by the minister.

Every rating flume shall be provided with a gage rod, which is to be placed on the side at the center of such flume. The gage rod shall be two inches in thickness and three inches wide, painted white, with heights above the floor of the rating flume clearly marked thereon in feet, and tenths of a foot with black lines and figures. The height of low water, high water, and flood stage of water shall be shown on the gage rod at elevations to correspond with the marking of these stages of water on the government gage rod placed in the stream from which water is taken for such ditch or canal.

GOVERNMENT GAGE RODS.

The minister may authorize some officer to place a gage rod, or rods, in all streams or reservoirs used as a source of supply for irrigation ditches or canals. The

gage rod, or rods, are to be permanently placed at some point for convenient reference, and clearly marked, so that the rise or fall of water in such stream or reservoir can be readily noted therefrom. The height of low water, high water, and flood water shall be designated on the rod with special marks and lettering, so that these stages of water may be apparent by inspection.

RESERVOIR SITES.

The lands forming sites suitable for ponds, basins, and reservoirs, which have been reserved from general sale and settlement, may be leased to any company or person applying therefor who have satisfied the minister of their or his ability to construct the works necessary to utilize the proposed site for the storage of water and the beneficial use of the same in irrigation.

The lease shall be for one year, with privilege of renewal from year to year, provided the lessee continues to use the lands for the purposes mentioned, and complies with all the provisions of the irrigation act.

The rental to be paid for lands leased for reservoir purposes shall be 1 cent per acre per annum, payable upon the 1st day of November in each and every year.

Should the lessee at any time cease to use the lands for the purposes mentioned, the lease shall be canceled and the lands become available for lease to any applicant therefor who shall have satisfied the minister of his ability to utilize the lands for the beneficial storage of water.

RIGHT OF WAY.

The right of way for any irrigation ditch or canal, or for the works connected therewith, through any and all lands, the title to which is vested in the Crown, as shown by the plans and books of reference filed in the department of the interior and approved by the surveyor-general, may be granted to the company or person constructing such irrigation ditch, canal, or works in connection therewith, free of charge.

FORM OF LICENSE TO DO NECESSARY PRELIMINARY WORK.

REGINA, ASSA., ———, 189—.

Received from Mr. ———, of ———, the sum of three dollars, being the fee prescribed by the Northwest irrigation act.

This receipt entitles the said ——— within ——— days to do the necessary preliminary work, and with such assistants as are necessary, to enter into and upon the following lands: ———, to take levels, make surveys, and do other necessary work in connection with the location of any works authorized by the said irrigation act.

—————,
Chief Engineer.

APPLICATION FOR LICENSE TO DIVERT WATER.

(Memorial filed in accordance with provisions of section eleven of the Northwest irrigation act.)

The memorial of ———, of section ———, township ———, range ———, west of the ——— meridian, in the district of ———, sheweth:

1. That the name— and residence— of the memorialist— are set forth above, and that ——— occupation ——— and ——— post-office address is ———.

2. That the memorialist— ask— for authority under the provisions of the Northwest irrigation act to divert from ———, on the ———, quarter of section ———, in

township —, range —, west of the — meridian, — cubic feet of water per second to be used for — purposes on the following lands, viz, —, and comprising a total acreage of — acres, and to construct the necessary works to enable the water so diverted to be used for the said — purposes.

3. That the works proposed to be constructed consist of —, and the location of and proposed method of constructing these works are shown on the maps, plans, profiles, and specifications accompanying this memorial.

4. That the financial standing of the memorialist— is as follows: —, and that the probable expenditure necessary to complete the proposed works will not exceed \$—.

5. That the extent of settlement along or in the vicinity of the said — is — residents.

6. That the probable number of the consumers of the water to be diverted is —, and the rate to be charged therefor is —.

7. That the character of the land upon which the water is to be used is —, and the value of such land in its present condition, with improvements, is \$— per acre.

To —.

Dated at —, —, 189—.

Approved and certified a true copy of the memorial filed with the —, this — day of —, 189—.

_____,
Chief Engineer.

NOTICE PUBLISHED BY APPLICANT FOR LICENSE.

Notice is hereby given that in accordance with the provisions of the Northwest irrigation act, the undersigned ha— filed the memorials and plans required by section — of the said act with the commissioner of public works, at Regina.

The applicant— appl— for the right to divert — water per second from — on the —, quarter of section —, township —, range —, west of the — meridian for — purposes, and for the right to construct the necessary works as shown by the plans and memorials filed, to enable the water so diverted to be used for the said — purposes on the following lands, viz, —.

_____,
Applicant.

Dated at —, —, 189—.

CERTIFICATE OF PERMISSION TO CONSTRUCT WORKS.

(Certificate issued in accordance with section 16 of the Northwest irrigation act.)

I, John S. Dennis, chief engineer, do hereby certify that —, who filed on the — day of — 189—, the necessary plans and memorial in connection with application to divert water from — for — purposes, ha— published the notice of such application in accordance with the provisions of the Northwest irrigation act, and ha— been granted permission to construct the proposed works across road allowances or surveyed public highways.

It is therefore recommended that the necessary authorization for the construction of the works, as shown by the plans and memorial filed, be issued to the applicant—, the time within which the construction of the works is to be completed being limited to one year from the date hereof.

_____,
Chief Engineer.

REGINA, ASSA., —, 189—.

FORM OF AUTHORIZATION.

Ref. —.

Authorization issued in accordance with the provisions of section 16 of the Northwest irrigation act.)

—, of —, having filed the necessary memorial and plans, and having applied with all the provisions of the Northwest irrigation act relating to applications for water rights, is hereby authorized to construct, so soon as the right of way therefor is obtained, the works, as shown by the said memorial and plans, necessary for the utilization of the water applied for from — for — purposes.

The construction of the works hereby authorized is to be completed within — from the date hereof, and in completing such construction the following changes and variations are to be made in the proposed structures as shown by the memorial and plans filed, viz, —.

—, Deputy of the Minister of the Interior.

DEPARTMENT OF THE INTERIOR,
Ottawa, —, 189—.

CERTIFICATE OF INSPECTION AND COMPLETION OF WORKS.

(Certificate issued in accordance with the provisions of section 24 of the Northwest irrigation act.)

DEPARTMENT OF PUBLIC WORKS.

I, John Stoughton Dennis, chief engineer, do hereby certify that I have inspected the — and the structures connected therewith constructed by — and using water from — on the — quarter of section —, township —, range — west of the — meridian, as shown by the memorial and plans filed by the said — on the — day of —, 1—, and that I find the said — and the works connected therewith to have been completed and constructed in accordance with the memorial and plans above mentioned.

The necessary right of way for the works in question across lands which do not belong to the applicant— has been obtained, and authority to construct the works across road allowances or surveyed highways has been granted, and the agreements which have been entered into for the supply of water for the irrigation of lands which are not the property of the applicant— have been filed.

I further certify that the — in question is capable of utilizing the water applied for, and is therefore entitled to a license for the undermentioned quantity of water from — for — purposes, and in accordance with the provisions of the Northwest irrigation act: At flood level, — cubic feet per second; at high water, — cubic feet per second; at low water, — cubic feet per second.

—, Chief Engineer.

REGINA, ASSA., —, 189—.

FORM OF LICENSE FOR WATER.

DEPARTMENT OF THE INTERIOR.

— license No. —. Source of supply, —. First issued, —.

Know all men by these presents, that by virtue of the authority vested in me by the Northwest irrigation act, I, —, minister of the interior, of Canada, do hereby grant unto —, hereinafter called the licensee, — executors, administrators, and assigns, full right, power, and license, subject to the conditions and restrictions contained in the Northwest irrigation act, to divert from — the following quantity of water, for use in the —, constructed by —, and as shown by

the application of ———, and the plans accompanying the same, dated the ——— day of ———, 189—, and filed in the department of the interior at Ottawa, and in the office of the commissioner of public works at Regina, and as authorized by order in council, or by the minister of the interior, as the case may be, on the ——— day of ———, 189—; that is to say, at flood level, ——— cubic feet per second; at high water, ——— cubic feet per second; at low water, ——— cubic feet per second, and to take and keep possession of the said quantity of water for and during the period during which this license may be in force under the provisions of the Northwest irrigation act.

But this license shall be subject to the following conditions, viz:

(1) That the period of flood level, high water, and low water in the said ——— shall be fixed and determined by marking on the gage rod placed in the said stream by the department of the interior.

(2) That this license shall be subject to forfeiture under and as provided by the Northwest irrigation act.

(3) That this license can only be assigned or transferred with the approval of the minister of the interior, and by using the form printed on the back thereof, and that such transfer must be recorded in the office of the commissioner of public works at Regina, Assiniboia, and the old license surrendered for cancellation, before a new license will be issued in name of transferee.

Dated at Ottawa this ——— day of ———, one thousand eight hundred and ninety—.

Witness:

_____,
Deputy of the Minister of the Interior.

FORM ON BACK OF LICENSE.

Docket ———. License No. ———. Source of supply, ———. The minister of the interior to ———. License to divert water for ——— from ———. Date of issue, ———. First issued, ———. Recorded in ———.

Department of the interior, Ottawa. Received and recorded in Book ——— this ——— day of ———, 189—, at irrigation branch, department of public works, Regina, Assiniboia.

_____,
Chief Engineer.

CANCELLATION OF LICENSE.

Ref ———.

DEPARTMENT OF THE INTERIOR,

Ottawa, ———, 189—.

SIR: Referring to your application for water from ——— for ——— purposes, as set forth in the memorial and plans filed by you in this department on the ———, 189—, I have to direct your attention to the fact that the authorization for the construction of the works necessary to utilize the water in question, which was issued to you on the ———, 189—, provided that the works were to be completed within ——— from the date of such authorization.

On the ——— Mr. J. S. Dennis, chief engineer, reported that ———.

I have therefore to notify you, under the provisions of section ——— of the Northwest irrigation act, that the rights granted you under the authorization of the above-mentioned date have lapsed, and that your application for water from ——— has been canceled.

I am, sir, your obedient servant,

_____,
Deputy of the Minister of the Interior.

_____, _____.

PARTIAL CANCELLATION OF LICENSE.

Ref. —

DEPARTMENT OF THE INTERIOR,
Ottawa, —, 189—.

SIR: With reference to your application for water from — for — purposes, as set forth in the memorial and plans filed by you in this department on the —, 189—, I have to direct your attention to the fact that the authorization for the construction of the works necessary to utilize the water in question, which was issued to you on the —, 189—, provided that the works were to be completed within — from the date of such authorization.

On the — Mr. J. S. Dennis, chief engineer, reported that an inspection made by him on the ground proved that —.

I have therefore to notify you, under the provisions of section — of the North-west irrigation act, that the rights granted you under the authorization of the above-mentioned date have lapsed in so far as the portion of the works which are reported to be uncompleted are concerned, and that your application for water as above described has been amended so as to cancel the right to water from the area which would have been irrigated from the uncompleted works.

I am, sir, your obedient servant,

—, —,
Deputy of the Minister of the Interior.

CERTIFICATE FOR RATING FLUME TO ACCOMPANY LICENSE.

I, —, —, do hereby certify that I have carefully examined the rating flume of —, erected near the headgate of —, constructed by —; that I find it properly placed and constructed with necessary gage rod properly marked, and that careful measurement of the capacity of the said rating flume proves it capable of admitting the undermentioned quantities of water from — into the —, above mentioned. At low water, — cubic feet per second; at high water, — cubic feet per second; at flood level, — cubic feet per second, these stages of water being determined by the gage rod placed in the said rating flume and marked in accordance with the regulations in that behalf.

I further certify that the said rating flume will admit the undermentioned quantities of water at each 6 inches rise of level of the water therein, as shown by the markings on the said gage rod: At 6 inches above low water, — cubic feet per second; at 12 inches above low water, — cubic feet per second; at 1½ feet above low water, — cubic feet per second; at 2 feet above low water, — cubic feet per second; at 2½ feet above low water, — cubic feet per second; at 3 feet above low water, — cubic feet per second; at 6 inches above high water, — cubic feet per second; at 12 inches above high water, — cubic feet per second; at 1½ feet above high water, — cubic feet per second; at 2 feet above high water, — cubic feet per second; at 2½ feet above high water, — cubic feet per second; at 3 feet above high water, — cubic feet per second.

—, —,
Chief Engineer.

Dated —, 189—.

FORM OF SUMMONS.

To ———, greeting:

You are hereby commanded that all things set aside and ceasing every excuse, you be and appear in your proper person before me, the undersigned, at ———, on ——— day of ———, 189—, by ——— o'clock in the ——— noon, and so on from day to day, to be then and there examined upon oath touching your knowledge of ———. And you are to bring with you and produce all papers and writings in your custody, power, and control, in any wise relating to the said matters; and take notice that if you neglect or refuse to appear at the time or place aforesaid you will be liable to be taken into custody and to be imprisoned in the nearest common gaol as for contempt of court, for a period not exceeding fourteen days.

Given under my hand and seal this ——— day of ———, 189—, at ———.

—————,
Chief Engineer.

CERTIFICATE FOR MEASURING DEVICE.

I, ———, hereby certify that I have examined the plans and model of the ——— proposed to be constructed and used by ——— for the measurement of water supplied by ——— for ——— purposes, and in accordance with the regulations in that behalf I hereby authorize the use of the said ——— for the division and measurement of water.

—————,
Chief Engineer.

CONTRACT FOR DELIVERY OF WATER.

Memorandum of agreement made and entered into, in triplicate, this ——— day of ———, 189—, between ——— of the first part and ——— of the second part.

Whereas the part— hereto of the first part ha— made an application under the provisions of the Northwest irrigation act for the right to divert water from ———, on the ——— quarter of section ———, township ———, range ——— west of the ——— meridian, for irrigating purposes, and ha— filed with the commissioner of public works, at Regina, and with the minister of the interior, the necessary memorial and plans required by the act, showing the location of the proposed works for the utilization of the water diverted, and the lands upon which the water is to be used for irrigation purposes;

And whereas the part— of the second part ——— the owner— of the ——— quarter of section ———, township ———, range ——— west of the ——— meridian, which is included in the said memorial and plans among the lands to be irrigated:

Now this agreement witnesseth, that the part— of the first part agree— to supply and the part— of the second part agree— to receive and use a sufficient quantity of water from the irrigation works in question, in accordance with the regulations regarding the duty of water, for the irrigation of ——— acres shown by the aforesaid memorial and plan as being irrigable from the said works, and to pay therefor on the following terms, namely: ———.

In witness whereof the parties hereunto have signed and sealed this agreement, in triplicate, at ———, on the day and date first above written.

In the presence of:

—————.

AGREEMENT FOR THE SALE OF WATER.

This agreement, made in triplicate the — day of —, A. D. 190—, between — (hereinafter called "the company"), of the first part, and —, of —, in the district of —, in the Northwest Territories of Canada (hereinafter called "the lessee"), of the second part, witnesseth:

Whereas the company has been granted the right under the provisions of "The Northwest irrigation act" to divert water from — for the irrigation of a certain tract of land, as shown by the memorial and maps and plans filed in the department of the interior at Ottawa, and the department of public works at Regina; and whereas the lessee is the owner of the following land, namely: —, comprising a total acreage of — acres, which are included within the tract to be irrigated, as shown by the said memorial and maps and plans;

(1) Now this agreement witnesseth that the company, for and in consideration of the sum of — dollars of lawful money of Canada, now paid to it by the lessee, the receipt whereof is hereby acknowledged, and in further consideration of the conditions, covenants, and stipulations hereinbelow specified, and of the annual rental hereafter to be paid, covenants and agrees to supply to the lessee during the irrigating season of each and every year, as fixed by the regulations prescribed under the provisions of "The Northwest irrigation act," out of the waters then being in its canal or any lateral or branch thereof that can conveniently be used for such purpose, — cubic feet of water per second for the irrigation of the land hereinbefore described, subject to the following conditions, restrictions, and regulations, that is to say:

First. The lessee, his heirs or assigns, shall pay annually in advance to the company, on or before the first day of May in each year, or at such later date as the company may fix, from the date hereof, as rental for the water supplied as herein provided, the sum of — dollars per annum (being at the rate of one dollar per acre of the above described lands, or one hundred and fifty dollars per cubic foot per second).

Second. The company may shut off the water agreed to be supplied at any time during the said irrigation season whenever necessary for repairing its canal or any branch or other work connected therewith, but shall give reasonable notice to the lessee of its intention to do so, whenever practicable.

Third. The water herein agreed to be supplied shall be used only to irrigate the land hereinbefore described, or some portion thereof, and no other land and for no other purpose, and under no circumstances shall the said water or any portion thereof be used for mining, milling, or mechanical power, or for any purpose not directly connected with or incidental to the irrigation of the said lands.

Fourth. The company shall deliver said quantity of water to the lessee, out of the water then being in the canal or any lateral or branch thereof that can be conveniently used for such purpose, at such point or points along the line of the said canal or any lateral or branches thereof as may be nearest or most practicable for the needs of the lands hereinbefore described, and said water shall be delivered through a headgate and measured over a weir, such headgate and weir being constructed and maintained by the company; the manner of withdrawing and regulating the supply of water from the said canal, lateral, or branches shall be prescribed by the company and shall at all times be under its control.

Fifth. The lessee, his heirs or assigns, shall not permit said water or any portion thereof supplied as aforesaid to run to waste when such waste can be prevented by reasonable care and diligence on the part of the lessee.

Sixth. The lessee, his heirs and assigns, agree to waive, and doth hereby waive, any and all claims for loss or damage by reason of or resulting from any leakage or seepage from the said canal or any of its laterals or branches, or from any reservoir or other works of the company, either upon the land hereinbefore mentioned or any

other tract of land belonging to ———, anything in the statute, law, or custom to the contrary notwithstanding, but the lessee shall promptly give due notice to the company of all damages resulting from such causes, and the company undertakes and agrees to take every reasonable means to correct and prevent all such leakage and seepage whenever notified of the same.

Seventh. The company shall at all times hereafter have the right to make such rules and regulations as may be necessary to regulate the delivery and distribution of the said water to the lessee, his heirs and assigns, and to add to and change or modify such rules and regulations; provided, however, that such rules and regulations shall in no way conflict with the terms of the clause of this agreement under which the water is supplied to the lessee; and provided further, that a copy of such rules and regulations and of any amendments or additions thereto shall be supplied to the lessee.

Eighth. No transfer of the whole or of any part of the water supplied under this agreement shall be valid or binding on the company unless written notice on forms to be obtained from the company is given to it, and no such transfer shall contemplate or authorize the diverting of the said water from the land herein described to any other land.

Ninth. In case the lessee, his heirs or assigns, shall fail, neglect, or refuse to take the said water and pay the rental therefor as herein provided, for any two years in succession, then this agreement, so far as it may bind either of the parties hereto, shall become null and void, and all rights and interests hereby created or then existing in favor of the lessee, his heirs or assigns, shall cease and determine, and all equitable and legal interests in the said water shall revert to and revest in the company, and without any right to the lessee, his heirs or assigns, of reclamation or compensation for moneys paid, as absolutely and fully and perfectly as if this agreement had never been made.

(2) And it is further agreed that if by reason of drought or of any cause beyond the control of the company the supply of water obtainable from whence the company as mentioned in the preamble hereof are authorized to divert water shall be insufficient to furnish an amount equal to all the water to be supplied from such source then covered by rents paid for that year, the company shall not be liable in any way for the shortness or deficiency of the supply occasioned by any of said causes, and it shall have the right to distribute such water as may be obtainable pro rata to all persons entitled thereto, and for such purpose may establish and enforce such rules and regulations as it may deem necessary and expedient.

(3) And it is further agreed and understood by and between the parties hereto, anything hereinbefore contained to the contrary notwithstanding, that nothing in this agreement shall be construed or taken as giving to the lessee, his heirs or assigns, any right or interest, whether by easement or otherwise, in any canal, lateral, branch or other work of any kind whatsoever owned or operated by the company, but the right of such lessee under this agreement shall be strictly limited to his right to receive delivery of the amount of water hereinbefore specified at such point or points as above mentioned; but nevertheless, in the event of the company being prevented by any cause beyond its control from carrying such water to the point or points where the same is to be delivered by means of its canal system, that there shall be no obligation on the part of the company to deliver such water by any other means.

In witness whereof the ——— company has caused these presents to be signed by its president, and attested by its secretary with the seal of the said company, and the party of the second part has hereunto set his signature, on the day and year first above mentioned.

President.

_____, Secretary.

Signed by the said ——— in the presence of ———.

_____.

**AMENDED AND ADDITIONAL RULES, REGULATIONS, AND FORMS
PRESCRIBED BY THE MINISTER OF THE INTERIOR, DECEMBER
26, 1900, UNDER THE PROVISIONS OF SECTION 51, OF THE
NORTHWEST IRRIGATION ACT.**

DUTY OF WATER.

The duty of water, or the ratio between a given quantity of water and the amount of land it will irrigate, shall be 150 acres for each cubic foot of water per second flowing constantly during the irrigating season, and all applications for water to irrigate any given area, and the division of the available water supply among applicants therefor, shall be made upon the basis of this duty of water.

AGREEMENTS FOR SALE OR USE OF WATER.

Agreements for sale or use of water for irrigation or other purposes may be in form prescribed in the regulations dated July 1, 1898, or in such other form as may be approved by the commissioner of public works for the Northwest Territories, and confirmed by the honorable the minister of the interior.

RECORD OF AGREEMENTS FOR SALE OR USE OF WATER.

All agreements for the sale or use of water shall be in triplicate and shall be recorded in the irrigation branch of the department of public works, at Regina, Assiniboia, one copy of such agreement being returned to each of the parties thereto with a proper certificate of record indorsed thereon by the chief engineer of the department.

No agreement for the sale or use of water shall have any force or effect unless it is duly recorded in the department of public works as herein provided, and a copy certified by the chief engineer of the said department filed in the department of the interior at Ottawa.

A fee of 25 cents shall be paid for the record of each and every agreement for the sale or use of water.

LIMITATION OF AGREEMENTS FOR SALE OR USE OF WATER.

No company shall agree to sell or supply on any terms a greater quantity of water than it is entitled to under its authorization and license in accordance with the duty of water, and any company entering into any agreement to sell or otherwise dispose of a greater quantity of water than it is entitled to under its authorization and license shall be liable to a fine of \$200 for each such agreement.

IRRIGATING SEASON.

The irrigating season, or that portion of the year during which water shall be supplied for irrigation, shall extend from the 1st day of May to the 1st day of October in each year.

THE IRRIGATION SYSTEM OF WYOMING.

By FRED BOND,
State Engineer of Wyoming,

AND

J. M. WILSON,
Agent and Expert, Irrigation Investigations, Office of Experiment Stations.

When Wyoming became a State the water-right complications which had accumulated under Territorial rule made irrigation one of the important questions to be considered in the organization of the new Commonwealth. The convention which framed the State constitution sought not simply to correct the mistakes of the past, but to create a system of water laws which would meet the needs of the future. The sections of the constitution which deal with irrigation were a distinct advance over anything before attempted. They declared broadly the doctrine that the waters of all natural streams, springs, lakes, or other collections of still water within the borders of the State are the property of the State, and that all uses made of these waters must be regulated and controlled by the State. The plan outlined in the constitution for putting this declaration into practical effect was briefly as follows :

The new State was divided into four great water divisions, the boundaries of which were fixed by drainage lines. A superintendent was provided for each division. Provision was also made for the appointment of a State engineer, and the qualifications and duties of this officer were carefully defined. The State engineer and the superintendents of divisions constitute a board of control for the supervision of the appropriation, diversion, and distribution of the public waters. This is a part of the organic law of the State.

At the first session of the State legislature the principles outlined in the constitution were elaborated into a law. It provided:

First, for the adjudication of all rights acquired prior to the passage of the act.

METHOD OF ADJUDICATION OF TERRITORIAL CLAIMS.

The law requires that all claims for water from the streams of the State shall be brought before one tribunal—the State board of control. The method of procedure for the adjudication of the claims on a stream is clearly outlined. In order that the board may have before it in the work of adjudication all the necessary physical facts, the stream is

gaged, and the ditches and the lands irrigated measured and mapped, under the direction of the State engineer. Publicity is secured by a notice in some newspaper of the county in which the stream is located of the time of beginning the survey and examination of the lands and ditches, and of the place and time of taking testimony in support of existing claims. In addition to the newspaper notice, the superintendent of the division in which the stream is located is required to send by registered mail a copy of this notice to each party having a recorded claim to the waters of the stream under adjudication. A blank proof of appropriation is also mailed with this notice. The statements called for by this blank include all the important facts necessary to an understanding of the claim, and include—

- The name and post-office address of the claimant;
- The nature of the use on which the claim is based;
- The time of the commencement of such use;
- The date of beginning of survey;
- The date of beginning construction;
- The date when completed;
- The date of beginning and completion of enlargements;
- The dimensions of the ditch as originally constructed, and as enlarged;
- The date when water was first used;
- If used for irrigation;
- The amount of land reclaimed the first year;
- The amount in subsequent years, with the dates of reclamation; and
- The amount of land the ditch is capable of irrigating, and such other facts as will show compliance with the law in acquiring the appropriation.

At the time and place fixed in the notice for the taking of testimony the claimants appear before the division superintendent or the State engineer and each under oath prepares his statement. If statements that can not be included in the form used are needed to complete the presentation of any case they are reduced to writing and certified to under oath. This is not often necessary, as the blank form covers all the essential facts for the establishment of a right. After the statements are completed, a notice by publication and by registered mail is given to all claimants that at a named time and place all the claims submitted will be open for inspection. This gives each claimant full opportunity to examine the other statements and to know exactly what is claimed by others. As all the ditches and lands irrigated have been measured and mapped, and the division superintendent has made a personal investigation of all the works before the claimants come before him, and the engineer who made the survey is present at the examination, the statements accord closely with the facts, and there is usually little ground for disagreement. If, however, any claimant desires to contest the claim of another, notice must be served on the division

superintendent within fifteen days after the inspection. The contest is heard before the division superintendent in accordance with the rules and practice governing in ordinary civil suits. The superintendent of the division has authority to issue subpoenas and compel the attendance of witnesses necessary for a proper hearing of the case. Before beginning the hearing the contestant and contestee each deposit \$8 with the division superintendent. If the hearing lasts more than a day, like sums are deposited for each succeeding day. After the board has reached a decision, the deposit of the party in whose favor the case is decided is returned, that of the loser is turned into the State treasury to the credit of the maintenance fund of the board of control. This rule tends to prevent the filing of false claims as well as to discourage contests except for good cause. In the whole history of the board there has not been to exceed a dozen contests.

The statements of the claimants, all testimony taken in the contested cases, copies of records, reports of surveys, and maps of ditches and lands irrigated, are then submitted to the board of control, which proceeds to determine the extent and priority of each right. The board is so constituted as to peculiarly fit it for this work of adjudication. The State engineer, who is president and executive head of the board, brings to his task, in addition to professional skill and knowledge of the flow of the streams, the resources of a well-equipped office, with expert engineering assistants. If special or technical information, not secured at the preliminary examination, is needed for the proper adjudication of any case it can be obtained at first hand. The superintendent of a division in which the stream is located has made a special study of this stream and has full knowledge of the uses of water made by the other appropriators, and is familiar with all the local conditions. The other three superintendents are by the work in their own division specially prepared for an intelligent and impartial consideration of all the questions involved. Such a tribunal does not need to act on prejudiced, incompetent, and conflicting testimony as to acres irrigated, capacity of ditches, and flow of streams. That the superintendents must distribute the water in accordance with their own findings is an effective safeguard against any hasty or careless procedure, and is a constant and effective stimulus to careful and well-considered action at every step of the adjudication.

In determining the extent and priority of these territorial rights, certain well-defined principles are kept in view. These are—

First. That water is not subject to private ownership, but is the property of the State.

Second. That the board of control is the trustee for the administering of a great public trust in the interests of the people of the State.

Third. That all rights to divert water from the streams must be

based on beneficial use, and that the right terminates when the use ceases.

Fourth. That the volume diverted shall in all cases be limited to the least amount actually necessary for the accomplishment of the purposes of the diversion.

Fifth. That under no circumstances shall the water diverted for irrigation exceed 1 cubic foot per second for each 70 acres of land actually irrigated.

Sixth. That the right to the use of the public waters attaches only to the use for which the right was originally obtained.

Seventh. That the right of diversion for irrigation attaches to the land reclaimed and none other; that the transfer of the land carries with it the right, and that apart from the land the right can not be transferred.

Eighth. That when a ditch waters land not the property of the ditch owner the right attaches to the land on which the water is used and not to the ditch. The owner of the lands irrigated makes the proof of appropriation and the certificate is issued to him. No certificate of appropriation can be issued to a ditch owner for the watering of lands not his own. The ditch owner is a common carrier and is subject to regulation as such.

Ninth. That when proper diligence has been exercised in the construction of works and in applying the water to the purpose for which it is diverted the priority is fixed by the date of beginning the survey. When diligence is lacking, the priority dates from the time of use.

At first the effect of the application of these principles was not clearly understood and these radical departures from all previous practice were by some viewed with alarm as tending to further unsettle rights and complicate the already difficult problem. Especially was there opposition to the limitation of rights to the use on the lands actually irrigated. Each appropriator was inclined to stand for the amount of his filing. But when the claims on the Little Laramie River, which was among the streams first adjudicated, were tabulated, and these, with the maps showing the stream, the ditches, the irrigated lands, and the discharge of the river during the irrigation season, were submitted to the inspection of the irrigators seeking the establishment of their water rights, it was at once manifest that to give to each appropriator all the water claimed in his original filing would be to transfer the control of the stream, during the season when water is most needed, to the first half dozen priorities and leave the 120 or more ranchmen and irrigators, all of whom were users of water and many of whom had been using it for years, without any legal rights of value during a large part of the irrigation season. On the other hand, it was equally clear that while the policy being followed by the board would protect the early appropriators in their rights to all the water

they had used or would need for the land irrigated, it would at the same time give to the later appropriators a valuable legal right to water for the land they had actually reclaimed. In the light of the actual facts, the idea that rights should be based on use and limited to the land irrigated took on a new meaning. Even the earlier appropriators, from whom opposition might have been expected, recognized the justice and wisdom of the board's policy and accepted its decision without contest. The outcome of the adjudication has been referred to because these principles have been adhered to in all the succeeding years with results generally satisfactory to all concerned. At every step in the procedure provision has been made for appeal from the findings of the board to the district court. But since the board was organized but three appeals have been taken, and in each case the board was sustained. The last stream on which territorial rights to water were determined was the Gray Bull River. The final order in this determination was made in the summer of 1900. It dealt with 236 claims, some of which dated back over twenty years. From beginning to end of this procedure there was not a controversy between irrigators, and the final order was accepted without a contest and without an appeal from the findings of the board.

When the determination of rights on a stream has been completed, a certificate is issued by the board of control to each lawful appropriator, setting forth the priority and volume of his diversion and describing the land to which the right attaches. The right attaches to these lands and to no other.

The fundamental idea in the establishment of a water right in Wyoming is that public interests are to be first considered, and that it is the business of the board of control to guard and protect the interests of all the citizens of the State, both present and prospective. The adjudications of the board are not contests between private interests, but are a ministerial inquiry into the acts by which a citizen seeks to become a partaker in the bounty of the State.

The care with which the board protects the public interests makes unnecessary the filing of contests for individual claims. As a result there is little contention among the appropriators and but small expense attending the proving up on a right. The total necessary expense, where the right is not contested, is \$1 for the issuance of the certificate, and 75 cents for its record with the county clerk.

APPROPRIATIONS UNDER STATE LAWS.

The business of the board of control, however, is not primarily to settle disputes. It is to so guard and protect all interests that disputes shall not arise. For this the law provides that before any construction of works for a new appropriation, or for the enlargement of any old one, can begin, the party who seeks the appropriation shall

file with the State engineer an application for a permit or license to take the water from the stream. This application must set forth in prescribed form—

The name and post-office address of the applicant;

The source of the water supply;

The nature of the proposed use;

The location and description of the proposed works;

The time within which it is proposed to begin construction;

The time required for the completion of construction; and

The time required for the application of the water to the proposed beneficial use.

In case the proposed right is for irrigation, the applicant gives the legal subdivisions of the land to be irrigated, with the acreage in each subdivision. It is further required that the application shall be accompanied by a map in duplicate, showing the course of the ditch, the course of the stream, and the lands to be irrigated. Before accepting the application the State engineer is required to make a careful examination of the filing and of the accompanying map. If there are errors, the papers must be returned to the applicant with instructions as to how they shall be corrected. When in proper form they are accepted and filed. Then follows an examination of all the interests to be considered in connection with the new application. If it is found that there is unappropriated water in the stream, that the proposed use is beneficial and reasonable, that it will not impair existing rights, that it is not detrimental to the public welfare, and that the party making the application is able to carry out the construction proposed, it is the duty of the State engineer to grant the permit. If, on the contrary, the proposed use threatens existing rights or seems not to be made in good faith, or is in any way prejudicial to the public welfare, it is the duty of the State engineer to refuse the permit. If the State engineer finds that the volume to be diverted is extravagant, or that any of the land described in the application can not be watered from the proposed ditch, or that the time named in the filing for the completion of the application to a beneficial use is too great, he may make such modifications as shall bring the application within the purpose of the law. Construction can not proceed until the permit has been indorsed on the application and the filing and the permit recorded and returned to the appropriator. This gives large powers to the State engineer, but the applicant is protected from arbitrary action by his right of appeal. Any person deeming himself aggrieved by any action of the State engineer in the matter of his appropriation may appeal to the State board of control. If dissatisfied with the findings of the board, he may carry the appeal to the district court. After a permit is granted reports of progress are required, and a failure to go forward with the work within the time fixed by the State

engineer forfeits the right, and the permit is canceled. This removes all uncertainty as to what rights on the stream are valid. A letter addressed to the State engineer concerning any appropriation or concerning the appropriations on any stream will bring by the next mail full information concerning all matters of inquiry. This is an effective protection against overappropriation, and prevents waste of energy and capital in the building of works for which there is no water.

The right to appropriate water can be obtained only by compliance with the law. Use without such compliance will not answer. Taking water from a Wyoming stream without a permit from the State engineer's office or cutting timber from State lands without a permit are both misdemeanors, and for the same reason. Those who comply with the water law receive a definite title to water. The title comes from the State and is a State patent to a share in the stream.

Upon the completion of the works, and when the water has been applied to the beneficial use proposed, notice is given to the State engineer. The State engineer or division superintendent, as may be agreed upon, then makes an examination of the works and reports to the board. If the appropriation has been perfected in accordance with the terms of the application and the permit of the State engineer, a certificate is issued by the board of control. This certificate is of the same character as that before discussed in connection with the adjudication of Territorial claims. The priority of the appropriation dates from the time of filing the application. A right once certified can be lost only by failure to keep the works in order and to use the water for a period of two successive years. The State, after issuing these certificates of appropriation or titles to water, protects them.

DISTRIBUTION OF WATER.

This brings us to the last and most important work of the board, the distribution of the water to those legally entitled to its use. All that has preceded is simply preparatory to this. For convenience in distribution and to secure prompt service, the four divisions are subdivided into districts. These subdivisions are made by the board as the necessity arises and, like the greater divisions, their boundaries lie along the drainage lines. For each district the governor appoints a water commissioner, who has immediate charge of the water distribution in his district. Over him is his division superintendent, and the State engineer supervises all. A table is prepared for each stream, showing the priorities and the volume of each appropriation. The commissioner is furnished with copies of the priority table and the map, so that he and the water users can have a clear understanding as to the relative rights of all parties interested in the distribution of the water. When there is scarcity or some one is deprived of water to which he is entitled, the commissioners are called on to regulate the

distribution. Each ditch owner is required to place in his ditch a measuring flume and headgate, so that the volume diverted may be measured and the flow regulated. If the use of water by any ditch interferes with the rights of others having prior appropriations, the headgate of the offending ditch is closed, wholly or partially. When a gate has once been set by a commissioner, it may not be changed or interfered with without incurring severe penalties. For this the commissioners are clothed with the police powers necessary for the enforcement of the law. The work of the commissioner is an important and delicate one and much depends upon the tact and judgment with which he exercises his authority.

As a result of the care with which the State guards these rights, the water users respect them. Instead of the uncertainty which existed when this law was enacted, when each did what was right in his own eyes without regard to the rights of his more peaceable or less favorably situated neighbor, there is now certainty that each will receive the water to which he is entitled. Under the first condition neighbor contended with neighbor and one community was at war with another. The shotgun and the Winchester were the instruments relied on for regulating the use of water. Neighbors who under the old régime were always at enmity now live in peace. Communities which were once torn asunder by contention over the water, are now bound together in peaceable and friendly relations by their sense of dependence on a common water supply. Each feels that the value of his water right depends upon the prompt compliance of every water user with the orders of the commissioner. If there is objection to any ruling of the commissioner, the rule is obeyed, but the matter is referred promptly to the division superintendent. If his ruling is not satisfactory the matter may be carried up to the State engineer, whose decision is final.

DEFECTS IN THE WYOMING LAW.

The operation of the Wyoming law has disclosed some defects. The constitution confers on the board of control the supervision of the waters of the State and of their appropriation, distribution, and diversion, and of the various officers connected therewith. Until a late decision by the supreme court, this was believed to give the board exclusive original jurisdiction in the determination of rights to water, and all of the Territorial rights thus far disposed of have been established under this belief. The decision referred to, *Carpenter v. Farm Investment Company* (61 Pac. Rep., 258), holds that an appropriator can choose between the courts or the board of control, and that either tribunal can determine the amount and priority of his appropriation. This decision introduces again an element of uncertainty and of confusion, and opens up possibilities of litigation which before were

supposed to be closed. One set of claimants on a river may elect to have their rights adjudicated by the board, while another set may choose to carry theirs to the courts. This leads to the establishment of two systems of priorities founded on entirely different modes of determination. Unless this defect in the law is promptly corrected by proper legislation or by constitutional amendment it will ultimately result in the demoralization of the system. The next session of the legislature should see to it that the remedy is applied. The board of control should be given exclusive original jurisdiction in the matter of adjudications, and a reasonable time limit should be fixed within which all claims should be submitted. Failure to comply with the law within the time fixed should work a forfeiture of right.

The State engineer is required to approve all applications for permits to appropriate water not detrimental to public interests, and to refuse all others. In many cases it is difficult to tell whether or not a new ditch will or will not interfere with existing rights. In all cases where there is uncertainty as to whether or not an application should be approved, the law should authorize the State engineer to require the applicant to give notice in a newspaper of his intention, in order that protests may be filed before official action is taken.

When proof is taken of the completion of an appropriation under a permit, the division superintendent should be required to submit all proofs for the inspection of the parties interested before action is taken by the board toward issuing the final certificate. This is already done under a resolution of the board, but it should be a requirement of the statutes.

The law makes the opening of a headgate which has been closed by the commissioner, a misdemeanor punishable by certain fines; but as this misdemeanor is usually committed in the night, and certainly in the absence of the commissioner, either the use of the water through a ditch, the headgate of which has been closed by a commissioner, should be made a misdemeanor, or the use of water through such headgate should be *prima facie* evidence of the guilt of the person getting the benefit of such use.

FORMS USED IN ADJUDICATING TERRITORIAL RIGHTS.

That the process of adjudicating a Territorial right may be more clearly understood, we have selected the case of John Moran, who appropriated water from Horseshoe Creek for the irrigation of 90 acres of land in the E. $\frac{1}{2}$ of the NE. $\frac{1}{4}$ of sec. 32, and the W. $\frac{1}{2}$ of the NW. $\frac{1}{4}$ of sec. 33, T. 29 N., R. 69 W. He constructed his ditch and watered his land in the spring of 1883. In 1889 he filed a statement of claim to water right with the Territorial engineer. The adjudication of the rights on this stream was made in 1892 and 1893. The forms used are copied as they appear in the records of the board.

NOTICE OF SURVEY AND EXAMINATION OF DITCHES AND LANDS
IRRIGATED.

First is the notice of the time of beginning the survey and examination of the ditches and of the lands irrigated. In addition to the individual notice sent to all claimants of record, it will be remembered that in every case where notices are required, a newspaper notice is also given for the claimants not on record. The notice was given that Mr. Moran might be present when the survey was made to give needed information concerning the ditch and the lands for which he claimed water. This saves much time for the engineer and satisfies the claimant that every item of importance connected with his irrigation plant had full consideration and will receive due notice in the engineer's report:

OFFICE OF THE BOARD OF CONTROL,
STATE OF WYOMING,
Cheyenne, September 6, 1892.

MR. JOHN MORAN,
Glendo, Wyoming:

DEAR SIR: You are hereby notified that the State engineer or assistant will on or after the 6th day of October, 1892, begin the measurement of Horseshoe Creek and tributaries, and the survey and measurements of the ditches diverting water therefrom, and will continue until all of said ditches have been surveyed and measured.

ELWOOD MEAD,
State Engineer.

NOTICE TO APPEAR AND GIVE PROOF OF APPROPRIATION.

Second is the notice to appear before the division superintendent and give proof of appropriation. This notice, with the blank statement of claim accompanying it, gave Mr. Moran full information as to the character of the proof required to substantiate his claim, and also gave him opportunity to secure the necessary facts before presenting himself to the division superintendent for an examination concerning his right.

STATE OF WYOMING, *County of Laramie, ss:*
TO JOHN MORAN, *Moran, Wyo.:*

You are hereby required to be and appear before me, the division superintendent of water division No. 1, at Glendo, in the county of Laramie, on the 15th day of November, 1892, to then and there offer proof of the appropriation of water for beneficial purposes from Horseshoe Creek, and you are hereby notified that a failure to so appear and furnish all the proof required will subject you to all the costs arising out of such failure.

Witness my hand this 8th day of November, A. D. 1892.

J. A. JOHNSTON,
Division Superintendent.

LETTER WHICH ACCOMPANIES BLANK FORM OF PROOF OF APPROPRIATION MAILED TO IRRIGATORS IN ADVANCE OF SUBMISSION OF TESTIMONY SHOWING RIGHT TO THE BENEFICIAL USE OF WATER.

NOVEMBER 8, 1892.

MR. JOHN MORAN.

DEAR SIR: Your attention is called to the inclosed proof of appropriation. It is the intention of the law and also of the board of control to make the adjudication of rights to the use of water as inexpensive to the appropriator as possible. Consequently, you are requested to cooperate with the division superintendent to whom you submit your testimony to the extent that you prepare yourself to answer all questions readily and accurately before the day set for submitting said testimony.

Your special attention is called to those questions whose answers indicate the date of your appropriation and use of the water, and to the acreage of land irrigated and description thereof.

By complying with this request you will not only facilitate the taking of testimony, but will insure the correct establishment of the respective rights and possibly prevent expensive and aggravating litigation.

Yours, truly,

J. A. JOHNSTON,
Division Superintendent.

PROOF OF APPROPRIATION.

Third is the proof of appropriation. It will be noticed that the inquiry reaches all the important facts necessary for the establishment of a right. This proof was taken at Glendo, the point most convenient for Mr. Moran and the other water users, and was without expense to him. The evidence was taken in the presence of his neighbors and of all the parties interested in the use of water from this stream. If the place of giving evidence had been at the capital of the State or at the county seat the expense would probably have kept some of the smaller claimants away, but as it was all were present and the presentation of the claims was complete.

PROOF OF APPROPRIATION OF WATER.

From Horseshoe Creek, Division No. 1.

State your name.—John Moran.

1. Q. Post-office.—A. Glendo.

2. Q. State the use to which the water has been applied.—A. Irrigation.

3. Q. State the means of diversion employed.—A. Ditch.

4. Q. If through a ditch state its name.—A. John Moran No. 1.

5. Q. (a) State date of survey of the ditch or other distributing works through which the water claimed is diverted; (b) the date when the construction of such ditch was begun and when completed.—A. (a) Spring of 1883; (b) spring of 1883.

6. Q. If any enlargements were made state the date when begun and the date when completed.—A. None.

7. Q. State dimensions of the ditch as originally constructed, and as enlarged, and, if measured by the county surveyor under the provisions of the act of 1886, give the results of such measurement.—A. 5.5 feet wide on top, 3 feet wide on bottom, and 12 inches deep, and grade of 10 feet per mile, as measured by county surveyor.

8. Q. State the name of person, association of persons, or corporation who built the ditch or canal, and the name or names of its present owners.—A. Built by John Moran; owned at present by John Moran.

9. Q. If water is claimed for irrigation, give the legal subdivisions of land owned or controlled by you for which an appropriation is claimed.—A. E. $\frac{1}{2}$ of NE. $\frac{1}{4}$, sec. 32, and NW. $\frac{1}{2}$ of W. $\frac{1}{4}$, sec. 33, T. 29 N., R. 69 W.

10. Q. State the nature of your title to the above-described land, and if not owned by you give the name of the owner and the nature of the possessory right which you exercise.—A. I own it.

11. Q. State the year when water was first used for irrigation or other beneficial purposes, and by whom.—A. Summer of 1883.

12. Q. If for irrigation, give the number of acres watered the first year, giving the legal subdivisions on which the water was used, and, as near as may be, the acres irrigated in each legal subdivision.—A. Ninety acres in E. $\frac{1}{2}$ of NE. $\frac{1}{4}$, sec. 32, and W. $\frac{1}{2}$ of NW. $\frac{1}{4}$, sec. 33, T. 29 N., R. 69 W.

13. Q. State the number of acres watered each subsequent year, and give the legal subdivisions on which the water was used, and, as near as may be, the acres irrigated in each legal subdivision.—A. Same every year after.

14. Q. State the number of acres irrigated from said ditch in 1892, and give the legal subdivisions on which water was used, and, as near as may be, the acres irrigated in each subdivision.—A. Ninety acres, as described.

15. Q. State the acreage said ditch is capable of watering, give the legal subdivisions of land which it can be made to irrigate, and state who owns said land.—A. Ninety acres.

16. Q. State your proportionate interest in said ditch.—A. Own entire ditch.

16 $\frac{1}{2}$. Q. The plat prepared by the State engineer is hereby accepted as showing correctly the location of the John Moran ditch No. 1 and the land which can be irrigated therefrom.¹—A. Yes.

17. Q. When does your irrigation season begin and when does it end?—A. Begins April 1, ends September 1.

18. Q. If water is used for other purposes than irrigation state the nature of such use and the time when such use began.—A. ———.

19. Q. How much water is required for such purpose?—A. ———.

20. Q. During what months is the water used?—A. ———.

21. Q. Have you or any other claimant of said appropriation filed a claim to water in the office of the county clerk? If so, give date of filing and the name of the party or parties interested in said claim.—A. Yes; July 6, 1899.

22. Q. Have you had sufficient water each year since the use for which an appropriation is claimed began?—A. No.

23. Q. If not, state the years of scarcity, the months when the supply was insufficient, and the reason of such scarcity.—A. Short during 1890 and 1891 on account of drought.

Remarks: ——— ———.

Signed:

JOHN MORAN.

GLENDON, WYO., November 15, 1892.

I hereby certify that the foregoing affidavit was read to the affiant in my presence before he signed his name thereto; that said affiant is to me personally known (or has been satisfactorily identified before me by ——— ———), and that I verily believe him to be a credible person and the person he represents himself to be; and that this affidavit was subscribed and sworn to before me at Glendo on this 15th day of November, 1892.

J. A. JOHNSTON,
Division Superintendent.

¹In case there is objection to the official plat the parties objecting must, when giving proof, file a written statement of the reason therefor; and must within thirty days file with the division superintendent a map of said ditch and irrigated lands, with affidavit of surveyor, giving date of survey, attached thereto.

NOTICE OF TIME AND PLACE OF SUBMITTING CLAIMS TO INSPECTION.

Fourth is the notice of the time and place of submitting the claims for the inspection of all interested parties. This opening of the claims to inspection gave Mr. Moran and the other water users an opportunity to fully inform themselves as to the character and extent of the rights claimed on Horseshoe Creek. Each statement received a searching and critical examination by the parties most interested. If there were errors in statement or mistakes in the survey they were pointed out and corrected. If false or exaggerated claims had been made they were brought to light, and if not rectified could be contested at the expense of the party in the wrong.

STATE OF WYOMING, *County of Laramie, ss:*

To JOHN MORAN:

You will take notice that the taking of evidence in the matter of the adjudication of water rights upon Horseshoe Creek has been completed, and that upon the 29th day of November, A. D. 1892, at Glendo, all of said evidence will be there presented and open to the inspection of any and all claimants of rights and priorities to water upon said stream, and will be so held open to the inspection of said parties for one day.

Witness my hand and seal this 15th day of November, 1892.

J. A. JOHNSTON,

Superintendent of Water Division No. 1.

I hereby acknowledge service of the above notice, and waive further notice, whether by publication or otherwise.

JOHN MORAN.

CERTIFICATE OF APPROPRIATION.

Fifth is the certificate of appropriation. Mr. Moran's claim was not contested. His statement was sustained by the report of the division superintendent, and the board of control made its findings in accordance with the proof submitted, as will appear by a comparison of the proof and certificate.

CERTIFICATE OF APPROPRIATION OF WATER.

Whereas John Moran, of Laramie County, Wyo., has presented to the board of control of the State of Wyoming proof of the appropriation of water from Horseshoe Creek through the John Moran No. 1 for irrigation.

Now know ye, that the board of control, under the provisions of chapter 8 of the session laws of 1890-91, entitled "An act providing for the supervision and use of the waters of the State," approved December 22, 1890, has, by an order dated the 11th day of March, A. D. 1893, determined and established the priority and amount of appropriation as follows: Name of appropriator, John Moran; post-office address, Glendo, Wyo.; general priority number on main stream, 6; amount of first appropriation, 1.29 cubic feet per second; date of first appropriation, spring, 1883; description of land to be irrigated, E. $\frac{1}{2}$ of NE. $\frac{1}{4}$ sec. 32, and W. $\frac{1}{2}$ of NW. $\frac{1}{4}$ sec. 33, T. 29 N., R. 69 W.

The right to water hereby confirmed and established is limited to the needs of said land, and the use is restricted to the place where acquired and to the purpose for which acquired; rights for irrigation not to exceed 1 cubic foot per second for each 70 acres watered.

In testimony whereof I, Elwood Mead, president of the State board of control, have hereunto set my hand this 11th day of March, A. D. 1893, and caused the seal of said board to be hereunto affixed.

ELWOOD MEAD, *President.*

Attest:

E. S. JOHNSTON, *Secretary.*

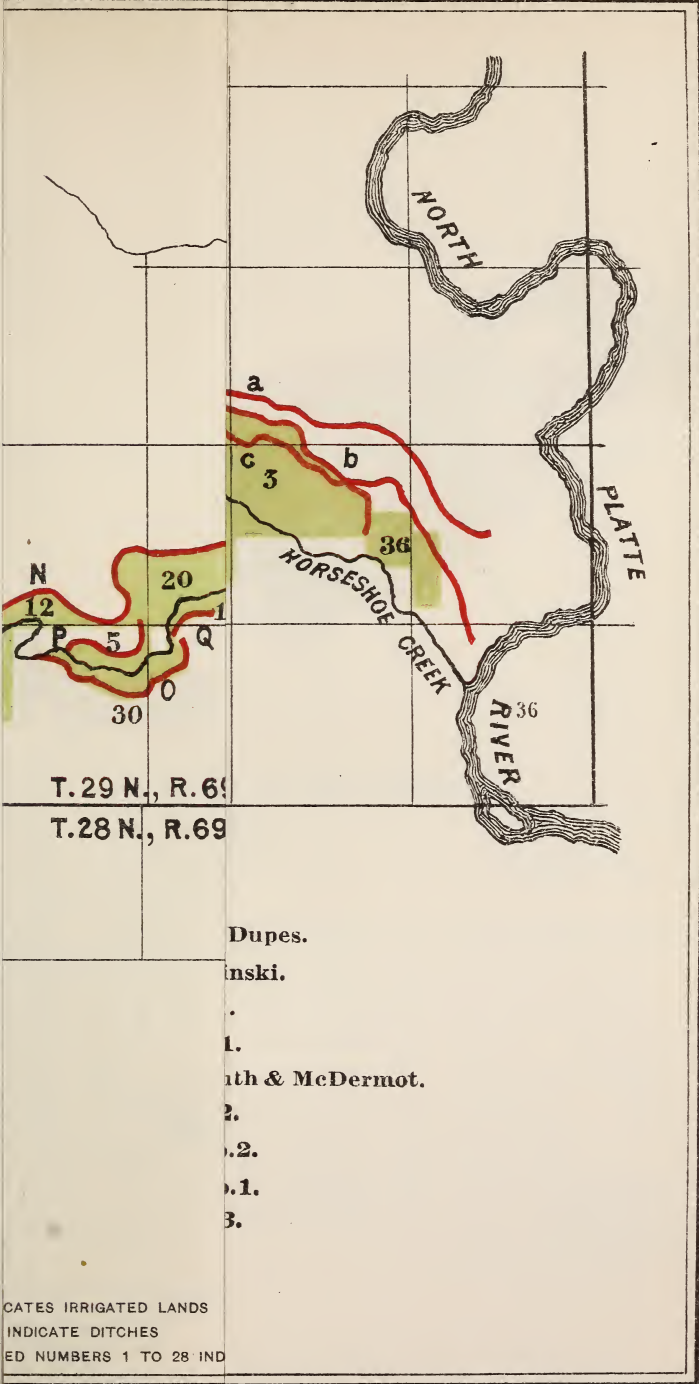
TABLE OF APPROPRIATIONS FROM HORSESHOE CREEK, SHOWING
PRIORITIES.

Sixth is a table showing the priority number, date, and volume of each appropriation from Horseshoe Creek, the place of diversion and the use to which the water is applied, and if for irrigation the acreage which may be watered under each right, with the legal description of the lands to which the right is attached. Mr. Moran's priority under this claim is No. 6. It will be noticed that there are two appropriations having priority No. 3. Robert M. Walker and Allen Laughlin built and used Walker Ditch No. 1 together. They have the same priority, but a certificate is issued to each for the watering of his own land. Patrick J. Hall's appropriation was overlooked when the table of priorities was arranged. When the omission was discovered it was found that the date of his priority was later than that of No. 5 and ahead of No. 6. It was, therefore, inserted in the table between No. 5 and No. 6 and given the priority No. $5\frac{1}{2}$.

Priority No.	Name of ditch.	Name of appropriator.	Post-office.	Date of appropriation.	Use to which applied.	Amount appropriated (cubic feet per second.)	Acres irrigated.	Description.
1	Walker, No. 1	Andrew Gilechrist.....	Cheyenne	Apr. 15, 1879	Domestic and irrigation.	11.53	800	N $\frac{1}{2}$ and N $\frac{1}{2}$ of SW $\frac{1}{4}$ sec. 27, NE $\frac{1}{4}$ sec. 28, SW $\frac{1}{4}$ of NW $\frac{1}{4}$ of sec. 26, SE $\frac{1}{4}$ sec. 21, NW $\frac{1}{4}$ of SW $\frac{1}{4}$ and S $\frac{1}{2}$ of S $\frac{1}{2}$ of sec. 22; all in T. 29 N., R. 68 W.
2	Walker, No. 2	do	do	Nov. 15, 1880	do	3.07	208	S $\frac{1}{2}$ of NE $\frac{1}{4}$, N $\frac{1}{2}$ of SE $\frac{1}{4}$ sec. 21, SW $\frac{1}{4}$ and NW $\frac{1}{4}$ of SE $\frac{1}{4}$ of sec. 22, T. 29 N., R. 68 W.
3	Walker, No. 1	Robert M. Walker	Glendo	Summer, 1881	Stock and irrigation ..	2.53	170	S $\frac{1}{2}$ of SW $\frac{1}{4}$, W $\frac{1}{2}$ of SE $\frac{1}{4}$, NE $\frac{1}{4}$ of SE $\frac{1}{4}$ sec. 27; NE $\frac{1}{4}$ of NW $\frac{1}{4}$, NW $\frac{1}{4}$ of NE $\frac{1}{4}$ of sec. 31, T. 29 N., R. 68 W.
3	do	Allen Laughlin.....	Badger	do	Domestic and irrigation.	2.10	140	N $\frac{1}{2}$ and SE $\frac{1}{4}$ of SE $\frac{1}{4}$ of NW $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$ of sec. 28, T. 29 N., R. 68 W.
4	St. Dennis Ditch	Michael Moran	Sheridan	May 15, 1882	Irrigation	1.29	90	N $\frac{1}{2}$ of SW $\frac{1}{4}$, SE $\frac{1}{4}$ of NW $\frac{1}{4}$ sec. 1, T. 28 N., R. 70 W.
5	Walker, No. 3	Andrew Gilechrist.....	Cheyenne	Oct. 15, 1882	Domestic and irrigation.	4.56	312	E $\frac{1}{2}$ of SW $\frac{1}{4}$ sec. 22, S $\frac{1}{2}$ of SW $\frac{1}{4}$ sec. 23, NW $\frac{1}{4}$, W $\frac{1}{2}$ of NE $\frac{1}{4}$ sec. 26, E $\frac{1}{2}$ of NE $\frac{1}{4}$ sec. 27, T. 29 N., R. 68 W.; SE $\frac{1}{4}$ sec. 22, S $\frac{1}{2}$ of SW $\frac{1}{4}$ of sec. 27, N $\frac{1}{2}$ of NE $\frac{1}{4}$ of sec. 33, T. 29, R. 69 W.
5 $\frac{1}{2}$	P. Hall Ditch	Patrick J. Hall	Glendo	Apr. 1, 1883	Irrigation	1.17	75	SW $\frac{1}{4}$ of SW $\frac{1}{4}$ of sec. 32 and W $\frac{1}{2}$ of NW $\frac{1}{4}$ of E $\frac{1}{2}$ of NE $\frac{1}{4}$ of sec. 32, T. 29 N., R. 69 W.
6	John Moran, No. 1	John Moran	do	Spring, 1883	do	1.39	90	S $\frac{1}{2}$ of NW $\frac{1}{4}$, SW $\frac{1}{4}$ of NE $\frac{1}{4}$, NE $\frac{1}{4}$ of SW $\frac{1}{4}$ of sec. 32, T. 29 N., R. 69 W.
7	Gorden Ditch.....	David Gorden	Spring Hill	Mar. —, 1884	Stock and irrigation ..	1.50	100	SE $\frac{1}{4}$ of NW $\frac{1}{4}$, SW $\frac{1}{4}$ of NE $\frac{1}{4}$, NW $\frac{1}{4}$ of SE $\frac{1}{4}$ of sec. 26, T. 29 N., R. 69 W.
8	Moran & Torgerson.....	James Moran	Orin Junction.....	May 1, 1884	Irrigation .....	.67	40	E $\frac{1}{2}$ of NE $\frac{1}{4}$ sec. 26, NW $\frac{1}{4}$ of NW $\frac{1}{4}$ of sec. 25, T. 29 N., R. 69 W.
8	do	Torval Torgerson.....	Glendo	do	do	1.39	90	N $\frac{1}{2}$ of S $\frac{1}{2}$ of sec. 8, T. 28 N., R. 70 W.
9	Macfarlane, No. 1.....	W. F. Macfarlane	do	Spring, 1884	Domestic and irrigation.	1.53	100	SE $\frac{1}{4}$ of sec. 36, T. 29 N., R. 70; SW $\frac{1}{4}$, NW $\frac{1}{4}$ of SE $\frac{1}{4}$ sec. 31, T. 29 N., R. 69.
10	T. Freney, Nos. 1 and 2	Thos. Freney	do	July 15, 1884	Irrigation	2.10	140	S $\frac{1}{2}$ of NW $\frac{1}{4}$, N $\frac{1}{2}$ of SW $\frac{1}{4}$, NE $\frac{1}{4}$, N $\frac{1}{2}$ of SE $\frac{1}{4}$ of sec. 10, NW $\frac{1}{4}$ of sec. 11, T. 28 N., R. 70 W.
11	Reeder Ditch.....	Jas. R. Reeder	do	Nov. 15, 1884	do	3.67	250	E $\frac{1}{2}$ of NE $\frac{1}{4}$ sec. 32, NW $\frac{1}{4}$ of NW $\frac{1}{4}$ sec. 33, S $\frac{1}{2}$ of SW $\frac{1}{4}$, SW $\frac{1}{4}$ of SE $\frac{1}{4}$ sec. 28, T. 29, R. 69.
12	John Moran, No. 2	John Moran	do	Mar. 10, 1885	do	2.96	200	NW $\frac{1}{4}$ of NW $\frac{1}{4}$ sec. 11, SE $\frac{1}{4}$ of SW $\frac{1}{4}$ sec. 2, T. 28, R. 70.
13	W. S. Wahl Ditch	W. S. Wahl.....	do	Mar. —, 1885	Irrigation and stock ..	.60	35	S $\frac{1}{2}$ of SE $\frac{1}{4}$ sec. 27, W $\frac{1}{2}$ of SW $\frac{1}{4}$ sec. 26, T. 29, R. 69.
14	Peter Paulsen, No. 1.....	Peter Paulsen	do	Apr. 15, 1885	Irrigation	1.1	70	SE $\frac{1}{4}$ of SW $\frac{1}{4}$, W $\frac{1}{2}$ of SE $\frac{1}{4}$ sec. 31, T. 29, R. 69.
15	Thos. Freney, No. 3.....	Thos. Freney	do	Feb. 15, 1886	do	1.1	70	NW $\frac{1}{4}$ of SW $\frac{1}{4}$ sec. 19, T. 29, R. 68.
16	Wellman & Dupes.....	C. W. Wellman	do	Fall, 1886	do .....	.39	20	SE $\frac{1}{4}$ sec. 27, T. 29, R. 69.
17	Peter Paulsen, No. 2	Peter Paulsen	do	Apr. —, 1887	do .....	.39	20	

Table of priorities and appropriations from Horseshoe Creek—Continued.

Pri- No.	Name of ditch.	Name of appropriator.	Post-office.	Date of ap- propriation.	Use to which applied.	Amount appropri- ated (cubic feet per second).	Acres irri- gated.	Description.
18	Conalo Ditch.....	William Conalo	Glendo	June —, 1887	Irrigation	0.31	15	SE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ sec. 27, T. 29, R. 69.
19	St. Dennis Ditch.....	Michael Moran	Sheridan	1887	do .....	.24	10	NW. $\frac{1}{4}$ of SW. $\frac{1}{4}$, SE. $\frac{1}{4}$ of NW. $\frac{1}{4}$ sec. 1, T. 28, R. 70.
20	John Moran, No. 2.....	Wm. Conalo	Glendo	June —, 1888	do	1.96	130	E. $\frac{1}{2}$ of SE. $\frac{1}{4}$ sec. 28, N. $\frac{1}{2}$ of SW. $\frac{1}{4}$, SE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ sec. 27, T. 29, R. 69.
21	P. Macfarlane	Peter Macfarlane	do	May —, 1889	do	1.2	83	SW. $\frac{1}{4}$ S. $\frac{1}{2}$ of SE. $\frac{1}{4}$ sec. 7, T. 28, R. 70.
22	Shives, No. 1	Ferguson Shives	Sheridan	1889	do	1.81	120	NE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ S. $\frac{1}{2}$ of NW. $\frac{1}{4}$ sec. 20, SE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ sec. 19, T. 29, R. 68.
23	Howard, Smith & Mc- Dermott	Isabelle Baird	Cheyenne	Nov. —, 1889	do	1.96	130	NW. $\frac{1}{4}$ sec. 21, T. 29, R. 68.
23	do	Bridg. McDermott	Glendo	do	do	2.3	100	NE. $\frac{1}{4}$ N. $\frac{1}{2}$ of SE. $\frac{1}{4}$ sec. 20, T. 29, R. 68.
25	Moran & Torgerson ..	James Moran	Orin Junction	1891	do .....	.8	55	SE. $\frac{1}{4}$ of NW. $\frac{1}{4}$, SW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ NW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ sec. 26, T. 29, R. 69.
24	Macfarlane, No. 1.....	W. F. Macfarlane	Glendo	1891	do	2.04	136	N. $\frac{1}{2}$ of S. $\frac{1}{2}$, SW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ sec. 8, NW. $\frac{1}{4}$ W. $\frac{1}{2}$ of NE. $\frac{1}{4}$ N. $\frac{1}{2}$ of SW. $\frac{1}{4}$ sec. 9, T. 28, R. 70.
26	Macfarlane, No. 2.....	do	do	Sept. 12, 1891	Irrigation and stock .....	.8	50	NE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 8, T. 28, R. 70.
27	Patrick Freaney	Patrick Freaney	do	Dec. 1, 1892	Irrigation	1.39	90	NE. $\frac{1}{4}$ sec. 2, T. 28, R. 70.
27	do	W. S. Waln	do	do	do	1.17	75	NW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ sec. 11, E. $\frac{1}{2}$ and SW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ sec. 2, T. 28, R. 70.
28	Howard, Smith & Mc- Dermott	Peter Paulsen	do	Jan. 1, 1893	do	1.07	75	SW. $\frac{1}{4}$ of sec. 21, T. 29 N., R. 68 W.
29	Macfarlane, No. 2.....	Wm. Macfarlane	do	Refused	do .....	.....	.....	.....
30	P. J. Hall, No. 2.....	P. J. Hall	do	Nov. 17, 1892	Irrigation .....	.50	35	3 A. NW. $\frac{1}{4}$ NE. $\frac{1}{4}$; 17 A. NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 33; 15 A. NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 34, T. 29 N., R. 69 W.
31	Dupes-Skolinski	Antoine Skolinski	do	do	do	1.21	85	17 A. NW. $\frac{1}{4}$ NE. $\frac{1}{4}$; 25 A. NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 19; 18 A. NW. $\frac{1}{4}$ NW. $\frac{1}{4}$; 35 A. NE. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 20, T. 29 N., R. 68 W.
32	Wellman & Dupes	H. J. Dupes	do	Apr. 14, 1891	do .....	.47	33	22 A. NE. $\frac{1}{4}$ SW. $\frac{1}{4}$; 11 A. NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 19, T. 29 N., R. 68 W.
33	Torval Torgerson, No. 1	Torval Torgerson	do	Nov. 22, 1892	do .....	.40	28	1 A. SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 26; 10 A. SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 25; 17 A. NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 25, T. 29 N., R. 69 W.
34	Patrick Freaney Ditch ..	Patrick Freaney	do	Dec. 1, 1892	do .....	.....	.....	Not proved up.
35	Highland Ditch	Antoine Skolinski et al	do	July 12, 1893	do .....	.....	.....	Do.
36	Hoffman, No. 1	Jos. E. Hoffman	do	Oct. 25, 1893	do	1.18	83	28 A. NE. $\frac{1}{4}$ SE. $\frac{1}{4}$; 25 A. SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 26; 20 A. NW. $\frac{1}{4}$ SW. $\frac{1}{4}$; 10 A. SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 25, T. 29 N., R. 68 W.





MAP OF IRRIGATED LANDS

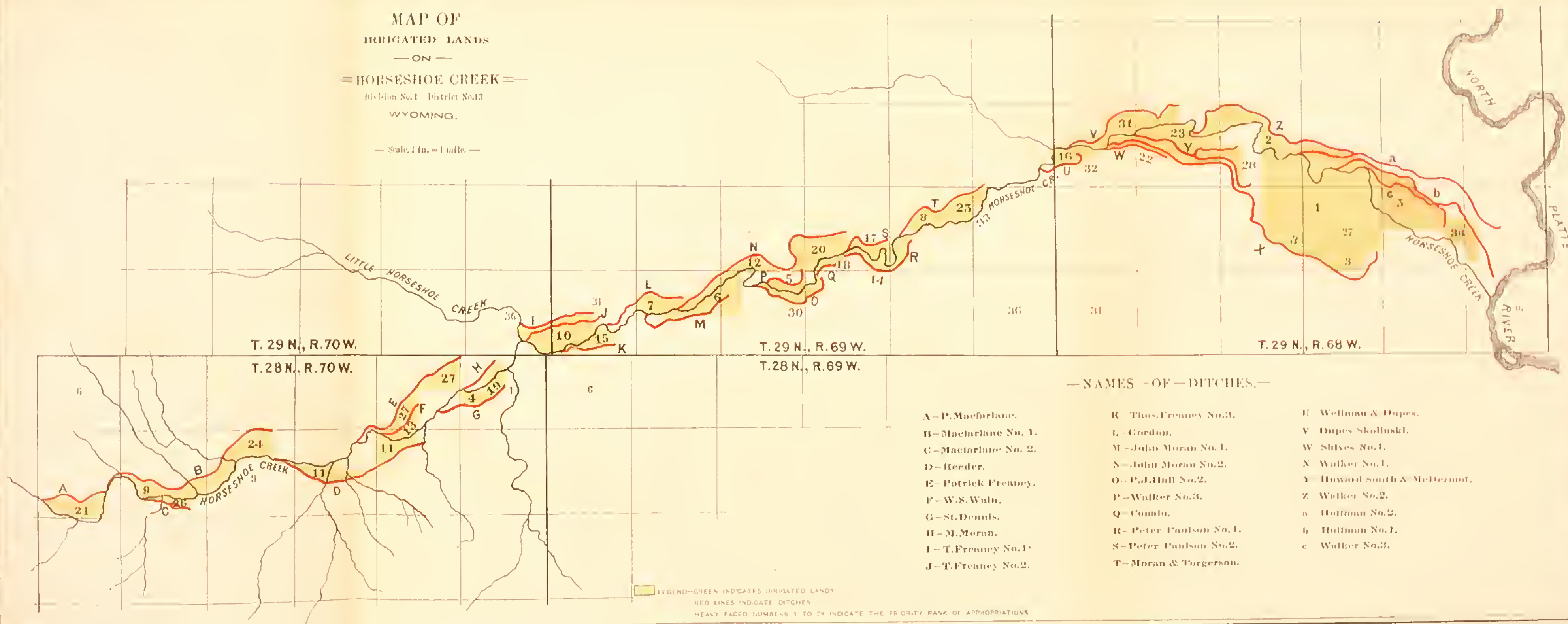
— ON —

= HORSESHOE CREEK =

Division No. 1 District No. 13

WYOMING.

— Scale, 1 in. = 1 mile. —



— NAMES — OF — DITCHES. —

A—P. Macfarlane.
B—Macfarlane No. 1.
C—Macfarlane No. 2.
D—Reeder.
E—Patrick Freney.
F—W.S. Wain.
G—St. Dennis.
H—M. Moran.
I—T. Freney No. 1.
J—T. Freney No. 2.

K—Thos. Freney No. 3.
L—Gordon.
M—John Moran No. 1.
N—John Moran No. 2.
O—P.J. Hill No. 2.
P—Walker No. 3.
Q—Condo.
R—Peter Paulson No. 1.
S—Peter Paulson No. 2.
T—Moran & Torgerson.

U—Wellman & Dupes.
V—Dupes Skollnick.
W—Shives No. 1.
X—Walker No. 1.
Y—Howard Smith & McDermott.
Z—Walker No. 2.
a—Hoffman No. 2.
b—Hoffman No. 1.
c—Walker No. 3.

LEGEND—GREEN INDICATES IRRIGATED LANDS
RED LINES INDICATE DITCHES
HEAVY FACED NUMBERS 1 TO 24 INDICATE THE PRIORITY RANK OF APPROPRIATIONS

MAP SHOWING DITCHES AND PRIORITIES.

Seventh is a map of that part of the Horseshoe watershed in which irrigation is practiced. This map shows the stream, the ditches, and the lands irrigated. Each tract is marked with the number of the appropriation as it appears in the table of priorities. The map and table are the water commissioner's guide in regulating the diversion and use of the water. (Pl. II.)

FORMS USED IN SECURING A WATER RIGHT UNDER THE STATE LAW.

All applications for permits to appropriate water under the State law must be made in the form prescribed on blanks furnished by the State engineer without expense to the applicant. With each blank is sent the following circular letter explaining the form and giving detailed instruction as to the preparation of the filing.

INSTRUCTIONS AND SUGGESTIONS TO APPLICANTS FOR PERMITS TO APPROPRIATE WATER.

Sections 917 to 927 and 931 to 933 of the Revised Statutes of Wyoming, 1899, govern the filing and approval of such applications.

The law governing the fees to be charged is found in section 108, Revised Statutes of Wyoming, 1899.

An abstract of these requirements and the requirements of this office are given below.

APPLICATIONS.

Applications must be made upon the blank form approved by the State engineer. Applications to enlarge existing ditches, or to increase the acreage watered therefrom, must be made on an enlargement blank. In giving dimensions remember the following:

"Width on top" is the width at surface water line. Depth is the depth of water which the ditch or canal is to carry.

The area to be irrigated must be given. Where not measured an estimate must be made, and where only a part of a subdivision is to be watered the estimate must give the acreage in each forty acres of these fractional subdivisions.

The law requires applications to be made and approved by the State engineer before work begins. No application which states that work has begun or has been completed will be approved.

MAPS.

Each application must be accompanied by two maps, one of which must be on tracing linen.

These maps must be drawn to a scale of 2 inches to the mile or larger, and on sheets not less than 6 by 9 inches.

They must show the location of the headgate by courses and distances from some Government corner. They must show the actual location of the ditch or canal, and where Government survey lines are crossed the distance to the nearest corner must be given. (Where corners can not be found, give the location of line by courses and distances.)

The map must show the course of and name of stream from which water is taken, the location and area of land to be irrigated, or place where water is to be used for other purposes. (This may be done by marking the boundaries or by coloring the areas.)

Whenever the canal line crosses streams or other ditches, the location of such crossings must be shown and such intersecting streams and ditches must be marked by ink of a different color.

Maps must contain the name of the ditch, canal, or reservoir, and the postoffice of the surveyor, with date of survey.

RESERVOIRS AND DAMS.

Applications for reservoirs and dams must be accompanied by a map in duplicate on tracing linen showing the dimensions and location of the reservoir. The dam must be tied to some Government corner by courses and distances.

Plans of dams, cribs, or embankments must be drawn on longitudinal scale of not less than 1 inch to 100 feet and for cross sections of not less than 1 inch to 20 feet. Timber, brush, and stone, where used, shall be shown in detailed plans, the scale of which shall be 1 inch to 4 feet. The plans for outlet and waste ways for reservoirs shall be drawn on scale of 1 inch to 4 feet and are required for all dams over 15 feet high.

The maps of reservoirs shall show the total area to be submerged and enough levels to permit of computing its capacity.

For earth dams the slope must not be less than 3 to 1 for the front, or water side, and 2 to 1 for the back.

FEEES.

For filing and examining applications for permits to appropriate water, \$2.

For recording statements of claim, \$1.50.

For recording applications for reservoir permits, \$1.

For recording any other water-right instrument—for the first 100 words, \$1; for each subsequent folio, 15 cents.

For issuing certificates of appropriation, \$1.

For making certified copies of records, per folio, 15 cents.

For attaching certificate, \$1.

ENGINEER'S OFFICE, *Cheyenne, Wyo.*

The method of procedure in acquiring a right under the State law is illustrated by copies of the records in the case of Joseph E. Hoffman, who also took water from Horseshoe Creek. His application for a permit to divert water for the irrigation of the SE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ of section 23, E. $\frac{1}{2}$ of NE. $\frac{1}{4}$ of section 26, N. $\frac{1}{2}$ of NW. $\frac{1}{4}$ of section 25, NE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ of section 26, NW. $\frac{1}{4}$ of SW. $\frac{1}{4}$, and S. $\frac{1}{2}$ of SW. $\frac{1}{4}$ of section 25, T. 29 N., R. 68 W., was filed with the State engineer October 25, 1893. Accompanying the application was a plat, in duplicate, showing the ditch and the lands to be watered therefrom (Pl. IV). The permit was granted October 26, 1893. The application and the permit indorsed thereon by the State engineer are as follows:

APPLICATION FOR A PERMIT TO DIVERT AND APPROPRIATE THE WATER OF THE STATE OF WYOMING.

Water Division No. 1. District No. 13.

I, Joseph E. Hoffman, of Glendo, county of Laramie, State of Wyoming, being duly sworn according to law, upon my oath say:

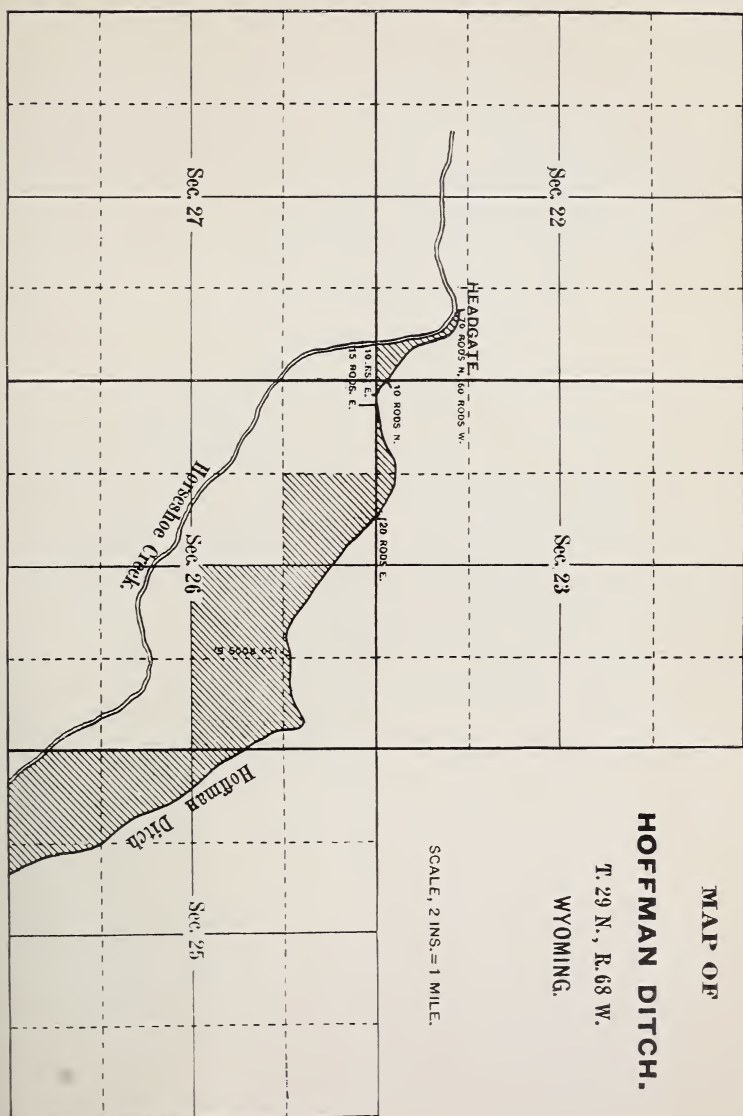
1. The name of the applicant is Joseph E. Hoffman.
2. The post-office address of the applicant is Glendo, Wyo.
3. The use to which the water is to be applied is to irrigate land under said ditch.
4. The name of the ditch or canal is Hoffman Ditch.

**MAP OF
HOFFMAN DITCH.**

T. 29 N., R. 68 W.

WYOMING.

SCALE, 2 INS. = 1 MILE.



MAP OF THE HOFFMAN DITCH, WYOMING.

5. The source of the proposed appropriation is Horseshoe Creek.
6. The headgate of the proposed ditch or canal is located in NE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ of section 21, T. 29 N., R. 68 W.
7. The said ditch or canal is to be $2\frac{3}{4}$ miles long and to pass through the following lands (give route by courses and distances, or by naming legal subdivisions crossed): SE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ of sec. 22; S. $\frac{1}{2}$ of SW. $\frac{1}{4}$ of sec. 23; NE. $\frac{1}{4}$ of NW. $\frac{1}{4}$ of sec. 26; NE. $\frac{1}{4}$ sec. 26; SW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ sec. 25; SW. $\frac{1}{4}$ sec. 25, T. 29 N., R. 68 W.
8. The dimensions of said works are (a) [At headgate]: Width on top (at water line), 10 feet; width on bottom, 4 feet; depth of water, 0.6 foot; grade, 4 feet per mile.
(b) Give dimensions at each point where reduced in size, stating miles from headgate [At 125 yards from headgate]: Width on top (at water line), 5 feet; width on bottom, 4 feet; depth of water, 0.5 foot; grade, 4 feet per mile. [At 225 yards from headgate]: Width on top (at water line), 7 feet; width on bottom, 4 feet; depth of water, 0.4 foot; grade, 4 feet per mile. [At 350 yards from headgate]: Width on top (at water line), 4 feet; width on bottom, 4 feet; depth of water, 1 foot; grade, 4 feet per mile.
9. Describe the character of proposed works, stating: First. The nature of material to be moved. Second. Number and length of tunnels, if any. Third. Amount of fluming, if any. Earth.
10. The estimated cost of said ditch is \$500.
11. The land to be irrigated has a total area of ——— acres, described as follows (give estimated acreage in fractions of subdivisions): SE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ of sec. 23; E. $\frac{1}{2}$ of NE. $\frac{1}{4}$, sec. 26; W. $\frac{1}{2}$ of NW. $\frac{1}{4}$ of sec. 25; NE. $\frac{1}{4}$ of SE. $\frac{1}{4}$, sec. 26; NW. $\frac{1}{4}$, SW. $\frac{1}{4}$, and S. $\frac{1}{2}$, SW. $\frac{1}{4}$, sec. 25, T. 29 N., R. 68 W.
12. Construction will begin on proposed works on or before ———, 189—.
13. The time required for the completion of ditches and other distributing works is one year from January 1, 1894.
14. The time required to complete the application of water to the beneficial use stated in this application is one year from January 1, 1894.
15. A map of the proposed ditch or canal, prepared in accordance with chapter 45, session laws of 1895, accompanies this application.

Signed:

JOSEPH E. HOFFMAN.

NOTE.—The statements in the foregoing application must comply with the requirements of chapter 45, session laws of 1895.

THE STATE OF WYOMING, *County of Laramie, ss:*

I hereby certify that the foregoing application was signed in my presence and sworn to before me by Joseph E. Hoffman this 24th day of October, 1893.

J. N. A. McDERMOTT,
Notary Public.

Commission expires May 22, 1895.

THE STATE OF WYOMING, *State Engineer's Office, ss:*

This is to certify that I have examined the foregoing application and do hereby grant the same, subject to the following limitations and conditions:

Construction of proposed work shall begin within one year from date of approval. The time for completing the work shall extend to September 1, 1895.

The time for completing the appropriation of water for beneficial use shall extend to September 1, 1896.

The amount of the appropriation shall be limited to 1 cubic foot per second of time for each 70 acres of land reclaimed on or before September 1, 1896, and the additional volume used for ——— purposes on or before said date.

Witness my hand this 26th day of October, A. D. 1893.

ELWOOD MEAD,
State Engineer.

PROOF OF APPROPRIATION.

It will be noticed that the permit requires that the work shall begin within one year from the granting of the application, and that the applicant is allowed until September 1, 1895, for the completion of his work, and that he is allowed a further interval of one year, or until September 1, 1896, for the completing of the application of the water to a beneficial use. On October 16, 1894, the State engineer was notified that the work was completed and that the water had been applied to the land. On account of the many territorial claims to be adjudicated it was not possible at this time for the board to take his proof, but his rights were recognized in the distribution of water until the case could be reached. On February 5, 1898, the applicant appeared at Glendo before the division superintendent, and, under oath, made proof as follows:

(Permit No. 604.)

PROOF OF APPROPRIATION OF WATER.

(In accordance with the provisions of section 928, chapter 14, title 9, division 1, Revised Statutes of Wyoming, and the regulations of the board of control thereunder.)

From Horseshoe, Division No. 1. District No. 13.

1. Q. State your name.—A. Joseph E. Hoffman.
2. Q. Post-office address.—A. Glendo, Wyo.
3. Q. Are you the original applicant for permit No. 604?—A. Yes.
4. Q. If not, state the date of your securing an interest therein and the nature of your interest in the works constructed under such permit.—A. ———.
5. Q. When did construction of the Hoffman No. 1 ditch (or other distributing works described in said permit) begin?—A. About August 15, 1894.
6. Q. When was it completed?—A. October 1, 1894.
7. Q. What are the dimensions of the ditch (or other distributing works) built under said permit?—A. Bottom $3\frac{1}{2}$ feet wide, 1 foot deep, grade $4\frac{1}{2}$ feet per mile.
8. Q. Give the legal subdivisions of land owned or controlled by you on which water has been used, and if an appropriation of water for irrigation is claimed, give the acreage which has been irrigated in each legal subdivision.—A. NE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ of sec. 26, 30 acres; NW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ of sec. 25, 20 acres; SW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ of sec. 25, 10 acres; SE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ of sec. 26, 30 acres.
9. Q. Give the date when, under the terms of this permit, water was first beneficially used.—A. October 1, 1894.
10. Q. If for irrigation, give the location and acreage irrigated the first year, and the location and acreage irrigated each subsequent year to the present.—A. ———.
11. Q. What crops were grown on this land in 1895? Give estimated acreage of each crop.—A. Oats, hay, wheat; 90 acres altogether.
12. Q. During what months is water beneficially used?—A. April, May, June, July, August.
13. Q. Give amount of your investment in the construction of ditch and laterals.—A. \$500.
14. Q. Give estimated cost per acre of preparing land for irrigation.—A. \$5.
15. Q. Does the map which accompanies this proof show correctly the location of diverting works and area of land where water is used?—A. Yes.

THE STATE OF WYOMING, *County of Laramie, ss:*

I, Joseph E. Hoffman, being first duly sworn, do depose and say that I have read the above and foregoing proof of appropriation of water; that I know the contents thereof, and that the facts therein stated are true.

In witness whereof I have hereunto set my hand this 5th day of February, A. D. 1898.

JOSEPH E. HOFFMAN.

GLEND0, WYO., *February 5, 1898.*

I hereby certify that the foregoing affidavit was read to the affiant in my presence before he signed his name thereto; that said affiant is to me personally known (or has been satisfactorily identified before me by ———), and that I verily believe him to be a credible person and the person he represents himself to be, and that this affidavit was subscribed and sworn to before me at Glendo, on this 5th day of February, 1898.

J. A. JOHNSTON,

Superintendent, Water Division No. 1.

NOTE.—This proof is intended to be used only by parties making appropriations under permits issued in accordance with section 928, chapter 14, title 9, division 1, Revised Statutes of Wyoming.

The map referred to in paragraph 14 must show the entire work in the case of individual ditches. In the case of larger works only one map of the entire canal need be filed. Individual proof must, however, show ditch from point of diversion from main canal and all laterals on land reclaimed. Where the duplicate map filed in the office of the State engineer and returned to the applicant gives the necessary details and shows accurately the location of completed work it may be filed.

The map which accompanies this proof must be on tracing linen, be accurately drawn on a scale of not less than 2 inches to the mile, and verified by the party making the measurements.

REPORT OF OFFICIAL EXAMINATION BY SUPERINTENDENT.

I hereby certify and report that pursuant to the order of reference, and in accordance with the notice thereof duly published, I appeared at Glendo on the 8th day of February, 1898, and took and received the foregoing sworn proof of appropriation of water through the Hoffman No. 1 ditch from Horseshoe Creek, under permit No. 604, by Joseph E. Hoffman, the owner thereof; that a personal examination of said ditch, and of the land irrigated thereunder and described in said permit was made by Price Martin, water commissioner of district No. 13, that he found said ditch had an average width of 3.75 feet, a depth of 1 foot, and a grade of about ——— feet per mile. He found a sufficient number of laterals of a capacity to fully irrigate the land described herein, and found that of the land described in said permit the following acreage has been irrigated and reclaimed in each 40-acre tract, to wit: 28 acres in NE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ of sec. 26; 20 acres in NW. $\frac{1}{4}$ of SW. $\frac{1}{4}$, and 10 acres in SW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ of sec. 25, and 25 acres in SE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ of sec. 26.

On this land the following crops were grown in 189—: 15 acres small grain, 2 acres potatoes, 10 acres alfalfa, balance in native hay.

I also certify that said proof was opened for public inspection on the ——— day of ———, 189—, at ———, in accordance with the provisions of said notice and the regulations of the board of control; that at said time ——— appeared ——— filed ——— contest or objection to said proof.

Wherefore I recommend that said appropriation be allowed and that a certificate of appropriation be issued in accordance with said proof and the tabulation thereof filed herewith.

I secured the granting of a certificate for 83 acres as described in the commissioner's report, the description of which is in conformity with the proof and the permit, the former claiming 90 acres irrigated.

J. A. JOHNSTON,
Superintendent of Water Division No. 1.

CERTIFICATE OF APPROPRIATION.

The applicant had not succeeded in watering all the lands in the original filing; hence some of these tracts do not appear in the proof. The examination and the survey of the division superintendent show that 28 acres had been irrigated in the NE. $\frac{1}{4}$ of the SE. $\frac{1}{4}$ and 25 acres in the SE. $\frac{1}{4}$ of the NE. $\frac{1}{4}$ of section 26; 20 acres in the NW. $\frac{1}{4}$ of the SW. $\frac{1}{4}$ and 10 acres in the SW. $\frac{1}{4}$ of the SW. $\frac{1}{4}$ of section 25, T. 29 N., R. 68 W., being 83 acres in all. The certificate is issued for water for these lands, and reads as follows:

CERTIFICATE OF APPROPRIATION OF WATER.

Whereas Joseph E. Hoffman, of Laramie County, Wyoming, has presented to the board of control of the State of Wyoming proof of the appropriation of water from Horseshoe Creek through the Hoffman No. 1 ditch, permit 604, for irrigation:

Now know ye that the board of control under the provisions of chapter 8 of the session laws of 1890-91, entitled "An act providing for the supervision and use of the waters of the State," approved December 22, 1890, has, by an order dated the 9th day of March, A. D. 1898, determined and established the priority and amount of appropriation as follows: Name of appropriator, Joseph E. Hoffman; post-office address, Glendo, Wyoming; general priority number on main stream, 36; amount of first appropriation, 1.18 cubic feet per second; date of first appropriation, October 25, 1893; description of land to be irrigated: 28 acres in NE. $\frac{1}{4}$ of SE. $\frac{1}{4}$; 25 acres in SE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ of sec. 26; 20 acres in NW. $\frac{1}{4}$ of SW. $\frac{1}{4}$; 10 acres in SW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ of sec. 25, T. 29 N., R. 68 W., being 83 acres in all.

The right to water hereby confirmed and established is limited to irrigation, and the use is restricted to the place where acquired and to the purpose for which acquired; rights for irrigation not to exceed one cubic foot per second for each seventy acres watered.

In testimony whereof, I, Elwood Mead, president of the State board of control, have hereunto set my hand this 9th day of October, A. D. 1898, and caused the seal of said board to be hereunto affixed.

ELWOOD MEAD, *President.*

Attest:

JAMES A. JOHNSTON, *Secretary.*

NOTICE POSTED ON HEADGATE WHEN DITCH IS CLOSED BY WATER COMMISSIONER.

Notice.—In accordance with the provisions of section 42, chapter 8, session laws of 1890-91 of the State of Wyoming, this ditch has been closed by the water commissioner. It must not be opened or interfered with until permission is received from me

_____,
Water Commissioner, District No. 1, of Division No. 1, Wyoming.

_____, 189-.



WYOMING DEVELOPMENT COMPANY CANAL NO. 2, WHEATLAND, WYOMING.

WATER LAWS OF WYOMING.

CONSTITUTIONAL PROVISIONS.

ARTICLE I.

Water control in State. SEC. 31. Water being essential to industrial prosperity, of limited amount and easy of diversion from its natural channels, its control must be in the State, which, in providing for its use, shall equally guard all the various interests involved.

ARTICLE VIII.

Water is property of State. SECTION 1. The water of all natural streams, springs, lakes, or other collections of still water, within the boundaries of the State, are hereby declared to be the property of the State.

Board of control. SEC. 2. There shall be constituted a board of control to be composed of the State engineer and superintendents of the water divisions, which shall, under such regulations as may be prescribed by law, have the supervision of the waters of the State, and of their appropriation, distribution, and diversion, and of the various officers connected therewith, its decisions to be subject to review by the courts of the State.

Appropriation. SEC. 3. Priority of appropriation for beneficial uses shall give the better right. No appropriation shall be denied except when such denial is demanded by the public interests.

Water divisions. SEC. 4. The legislature shall by law divide the State into four water divisions and provide for the appointment of superintendents thereof.

State engineer. SEC. 5. There shall be a State engineer, who shall be appointed by the governor of the State and confirmed by the senate; he shall hold his office for the term of six years, or until his successor shall have been appointed and shall have qualified; he shall be president of the board of control, and shall have general supervision of the waters of the State and of the officers connected with its distribution. No person shall be appointed to this position who has not such theoretical knowledge and such practical experience and skill as shall fit him for the position.

ARTICLE XIII.

May acquire water by appropriation and condemnation. SEC. 5. Municipal corporations shall have the same right as individuals to acquire rights, by prior appropriation and otherwise, to the use of water for domestic and municipal purposes, and the legislature shall provide by law for the exercise upon the part of incorporated cities, towns, and villages of the right of eminent domain for the purpose of acquiring from prior appropriators, upon the payment of just compensation, such water as may be necessary for the well-being thereof and for domestic uses.

REVISED STATUTES OF 1899.

STATE ENGINEER.

Oath and bond—Qualification. SEC. 101. Before entering upon the duties of his office, the State engineer shall take the oath prescribed by the constitution. He shall enter into a bond to the State of Wyoming in the penal sum of five thousand dollars, with no less than two

sureties, and conditioned for the faithful discharge of the duties of his office, and for the delivery to his successor, or other officer appointed by the governor to receive the same, all moneys, books, and other property belonging to the State, then in his hands or under his control, or with which he may be legally chargeable as such officer. No persons shall be appointed as such State engineer who is not known to have such theoretical knowledge and practical skill and experience as shall fit him for the position.

Salary. SEC. 102. The State engineer shall receive a salary of two thousand five hundred dollars per annum.

Office at State capitol. SEC. 103. The State engineer shall keep his office at the State capital, in the capitol building.

Duties. SEC. 104. The State engineer shall make, or cause to be made, measurements and calculations of the discharge of streams, from which water shall be taken for beneficial purposes, commencing such work upon those streams as are most used for irrigation, or other beneficial purposes. He shall collect facts and make surveys to determine the most suitable location for constructing works for utilizing the water of the State, and to ascertain the location of the lands best suited for irrigation. He shall examine reservoir sites and shall, in his reports, embody all the facts ascertained by such surveys and examinations, including, wherever practicable, estimates of the cost of proposed irrigation works, and of the improvements of reservoir sites. He shall become conversant with the water ways of the State, and the needs of the State as to irrigation matters, and in his reports to the governor he shall make such suggestions as to the amendment of existing laws or the enactment of new laws as his information and experience shall suggest, and he shall keep in his office full and proper records of his work, observations, and calculations, all of which shall be the property of the State.

Assistant engineer. SEC. 105. The State engineer shall have the power to employ an assistant engineer, at an expense not to exceed twelve hundred dollars per year, and to employ other assistants at a total additional expense not to exceed five hundred dollars per year; such assistant engineer and such additional assistants to be paid out of any money appropriated for that purpose, on certificates of the State engineer, showing the amount of such employment, and the compensation therefor, and on the presentation of such certificate to the State auditor he shall issue a warrant on the State treasurer for the amount thereof.

Entitled to actual traveling expenses, when. SEC. 106. When the State engineer, or his assistant engineer, is called away from his office he shall be entitled to his actual traveling expenses, which shall be paid out of any money appropriated for that purpose, on the certificate of said State engineer. Such certificate shall be presented to the State auditor, who shall thereupon draw upon the State treasurer for the amount thereof.

Reports. SEC. 107. The State engineer shall prepare and render to the governor, biennially, and oftener if required, full and true reports of his work, touching all matters and duties devolving upon him by virtue of his office, which report shall be delivered to the governor on or before the thirtieth day of November, of the year preceding the regular session of the legislature.

Fees. SEC. 108. The State engineer shall receive the following fees, which shall be collected in advance, and be paid by him into the general fund of the State treasury as by law provided:

For filing and examining applications for permits to appropriate water, and maps of same, two dollars.

For recording any water-right instrument not specified above, one dollar for the first one hundred words, and for each additional folio, fifteen cents.

For issuing certificates of appropriation of water, one dollar; provided that said fee of one dollar shall be by each appropriator or claimant paid to the water-division

superintendent at the time of the submission of testimony and proof of appropriation of water by such appropriator or claimant, before the said division superintendent, as by law provided, which said fee shall be by said superintendent immediately turned over to the said State engineer, and his receipt taken therefor and filed in the records of the board of control.

For making certified copies of any document recorded or filed in the State engineer's office, per folio, fifteen cents, and for each certificate attached thereto, one dollar.

Fees paid to general fund.

SEC. 109. All moneys received by the State engineer in accordance with the provisions of section one hundred and eight shall be paid by him into the State treasury on the first Monday of January, April, July, and October, respectively. The State treasurer shall credit the same to the general fund.

WATER DIVISIONS AND DIVISION SUPERINTENDENTS.

Water divisions defined. SEC. 848. The State of Wyoming is hereby divided into four water divisions, as follows:

Water Division No. 1 shall consist of all lands within this State drained by the North Platte River and the tributaries of the North Platte River and the South Platte River, Snake River (a tributary of Green River) and its tributaries, and Running Water Creek and its tributaries.

Water Division No. 2 shall consist of all lands within this State drained by the tributaries of the Yellowstone and Missouri rivers north of the watershed of the North Platte River and Running Water Creek and east of the summit of the Big Horn Mountains.

Water Division No. 3 shall consist of all lands within this State drained by the Big Horn River and its tributaries and by Clarks Fork and its tributaries.

Water Division No. 4 shall consist of all lands within this State drained by the Green, Bear, and Snake rivers and the tributaries thereof, except Snake River (a tributary of Green River) and its tributaries.

Division superintendents, appointment and term of.

SEC. 849. There shall be one superintendent for each of the water divisions, who shall be appointed by the governor, with the consent of the senate, who shall hold his office for four years, or until his successor is appointed and shall have qualified, and who shall reside in the water district for which he is appointed. The superintendent of each water division shall have immediate direction and control of the acts of the water commissioners and of the distribution of water in his water division, and shall perform such duties as shall devolve upon him as a member of the board of control.

Duties. SEC. 850. Said division superintendent shall have general control over the water commissioners of the several districts within his division. He shall, under the general supervision of the State engineer, execute the laws relative to the distribution of water in accordance with the rights of priority of appropriation, and perform such other functions as may be assigned to him by the State engineer.

May make regulations. SEC. 851. Said division superintendent shall, in the distribution of water, be governed by the provisions of this title, but for the better discharge of his duties he shall have authority to make such other regulations to secure the equal and fair distribution of water in accordance with the rights of priority of appropriation as may, in his judgment, be needed in his division: *Provided*, Such regulations shall not be in violation of the laws of the State, but shall be merely supplementary to and necessary to enforce the provisions of the general laws and amendments thereto.

Appeal from. SEC. 852. Any person, ditch company, or ditch owner who may deem himself injured or discriminated against by any such order or regulations of such division superintendent shall have the right to appeal from the same to the State engineer by filing with the State engineer a copy of the order or regulation complained of and a statement of the manner in which the same injuriously affects the petitioner's interest. The State engineer shall, after due notice, hear whatever testimony may be brought forward by the petitioner, either orally or by affidavit, and, through the division superintendent, shall have the power to suspend, amend, or confirm the order complained of.

Water commissioners to report to superintendent. SEC. 853. All water commissioners shall make reports to the division superintendent of their division as often as may be deemed necessary by said superintendent. Said reports shall contain the following information: The amount of water necessary to supply all the ditches, canals, and reservoirs of that district; the amount of water actually coming into the district to supply such ditches, canals, and reservoirs; whether such supply is on the increase or decrease; what ditches, canals, and reservoirs are at that time without their proper supply, and the probability as to what the supply will be during the period before the next report will be required, and such other and further information as the division superintendent of that division may suggest.

Reports filed, order of superintendents. SEC. 854. Said division superintendent shall carefully file and preserve such reports, and shall from them ascertain what ditches, canals, and reservoirs are, and what are not, receiving their proper supply of water; and if it shall appear that in any division of that district any ditch, canal, or reservoir is receiving water whose priority postdates that of the ditch, canal, or reservoir in another district, as ascertained from his register, he shall at once order such postdated ditch, canal, or reservoir shut down, and the water given to the elder ditch, canal, or reservoir, his orders being directed at all times to the enforcement of priority of appropriation, according to his tabulated statement of priority, to the whole division, and without regard to the district within which the ditches, canals, or reservoirs may be located. The reports of water commissioners to the division superintendents of irrigation shall be filed and kept in the office of the State engineer.

Compensation. SEC. 855. Water-division superintendents of water divisions numbers two, three, and four shall each be paid for his services as such superintendent and as a member of the special land commission for the selection of State lands the sum of eight dollars per day for every day actually consumed in the performance of his duties as such division superintendent and as such special land commissioner, and in addition be paid his traveling expenses when called away from home to the performance of his duties. The superintendent of water division number one shall receive annually a salary of fifteen hundred dollars, payable in monthly installments, in full compensation for all services as water-division superintendent and as a member of the special land commission for the selection of State lands and as secretary of the said State board of control and special land commission, and shall in addition be paid his actual traveling expenses when called away from home to the performance of his duties.

Oath and bond. SEC. 856. Before entering upon the duties of his office, such division superintendent shall take and subscribe an oath before some officer authorized by the laws of the State to administer oaths to faithfully perform the duties of his office, and file with the secretary of state said oath and his official bond in the penal sum of two thousand five hundred dollars, with not less than two sureties, to be approved by the governor of the State, and conditioned for the faithful discharge of the duties of his office.

Board of control, officers. SEC. 857. There is hereby constituted a board of control composed of the State engineer and the superintendents of the four water divisions. Said board shall have an office with the State engineer at the capitol, at Cheyenne, and shall hold two meetings each year for the transaction of such business as may come before it, the first of said meetings to begin on the second Wednesday in March and the second on the third Wednesday in October. The State engineer shall be ex officio president of said board, and shall have the right to vote on all questions coming before it, and a majority of all the members of said board shall constitute a quorum to transact business.

Secretary of board. SEC. 858. The superintendent of water division number one shall be the secretary of the State board of control, and it shall be his duty to keep a full, true, and complete record of the transactions of the said State board of control and of the special land commission, and shall certify, under seal, all certificates of appropriation of water made in accordance with law.

Duty at first meeting. SEC. 859. It shall be the duty of said board at its first meeting to make proper arrangements for beginning the determination of the priorities of right to the use of the public waters of the State, which determination shall begin on the streams most used for irrigation, and be continued as rapidly as practicable until all the claims for appropriation now on record shall have been adjudicated.

Streams to be first adjudicated. SEC. 860. The board of control shall decide at their first meeting the streams to be first adjudicated, and shall fix a time for beginning of taking of testimony and the making of such examination as will enable them to determine the rights of the various claimants.

Notice of proceedings. SEC. 861. The said board shall prepare a notice, setting forth the date when the engineer will begin a measurement of the stream and the ditches diverting the water therefrom, and a place and a day certain when the superintendent of the water division in which the stream to be adjudicated is situated shall begin the taking of testimony as to the rights of the parties claiming water therefrom. Said notice shall be published in two issues of a newspaper having general circulation in the county in which such stream is situated, the publication of said notice to be at least thirty days prior to the beginning of taking testimony by said division superintendent, or for the measurement of the stream by the State engineer, or his assistant, and the superintendent taking such testimony shall have the power to adjourn the taking of evidence from time to time and from place to place: *Provided*, All places appointed and adjourned to by the superintendent shall be so situated, as related to the streams, as shall best suit the proper convenience of the persons interested in the determination of such priorities and appropriations.

Notice to claimants. SEC. 862. It shall also be the duty of said division superintendent to mail to each party having a recorded claim to waters of said stream, by registered mail, a similar notice setting forth the date when the State engineer or his assistant will begin the examination of the stream and ditches diverting water therefrom, and also the date when the superintendent will begin the taking of testimony, and the date when the taking of such testimony by said division superintendent shall close.

Statement of claimant. SEC. 863. He shall, in addition, inclose with said notice a blank form on which said claimant shall present in writing all the particulars showing the amounts and dates of appropriations to the use of water of said stream to which he lays claim, the said statement to include the following:

The name and post-office address of the claimant.

The nature of the use on which the claim for appropriation is based.

The time of the commencement of such use, and if distributing works are required.

The date of beginning of survey.

The date of beginning of construction.

The date when completed.

The date of beginning and completion of enlargements.

The dimensions of the ditch as originally constructed and as enlarged.

The date when water was first used for irrigation or other beneficial purposes, and if used for irrigation, the amount of land reclaimed the first year; the amount in subsequent years, with the dates of reclamation, and the amount of land such ditch is capable of irrigating.

The character of the soil and the kind of crops cultivated, and such other facts as will show a compliance with the law in acquiring the appropriation and the rank of priority claimed.

Statements to be under oath. SEC. 864. Each of said claimants shall be required to certify to his statements under oath, and the superintendent of the water division in which the testimony is taken is hereby authorized to administer such oaths, which shall be done without charge to the claimant, as also shall be the furnishing of blank forms for said statement.

Superintendent takes testimony, when. SEC. 865. Upon the date named in the preceding notice, the division superintendent shall begin the taking of said testimony, and shall continue until said testimony shall be completed: *Provided*, That in case the division superintendent of any water district is directly or indirectly interested in the water of any stream of his division, the taking of evidence, in so far as relates to said stream, shall be under the direction of the division superintendent of the next nearest water division, or under the direct personal supervision of the State engineer, as may be deemed most expedient.

Notice upon completion of testimony. SEC. 866. Upon the completion of the taking of evidence by the division superintendent, it shall be his duty to at once give notice, in one issue of some newspaper of general circulation in the county where such determination is, and by registered mail to the various claimants, that upon a certain day, and a place named in the notice, all of said evidence shall be open to inspection of the various claimants, and said superintendent shall keep said evidence open to inspection at said places not less than one day and not more than five days.

Contests. SEC. 867. Should any person, corporation, or association of persons owning any irrigation works, or claiming any interest in the stream or streams involved in the adjudication desire to contest any of the rights of the persons, corporations, or associations who have submitted their evidence to the superintendent as aforesaid, such persons, corporations, or associations shall, within fifteen days after the testimony so taken shall have been opened to public inspection, in writing, notify the superintendent of the water division in which is located said irrigation works or stream or streams, stating with reasonable certainty the grounds of their proposed contest, which statement shall be verified by the affidavit of the contestant, his agent or attorney, and the said division superintendent shall notify the said contestant and the person, corporation, or association whose rights are contested to appear before him at such convenient place as the superintendent shall designate in said notice.

Hearing. SEC. 868. Said superintendent shall also fix the time, both as to the day and hour, for the hearing of said contest, which date shall not be less than thirty nor more than sixty days from the date the notice is served on the party, association, or corporation, which notice and the return thereof shall be made in the same manner as summons are served in civil actions in the district courts of this

State. Superintendents of water divisions shall have power to adjourn hearings from time to time upon reasonable notice to all the parties interested, and to issue subpoenas and compel the attendance of witnesses to testify upon such hearings, which shall be served in the same manner as subpoenas issued out of the district courts of the State, and shall have the power to compel such witnesses so subpoenaed to testify and give evidence in said matter, and said witnesses shall receive fees as in civil cases, to be paid by the party or parties against whom the contest shall be finally determined. The evidence on such proceedings shall be confined to the subjects enumerated in the notice of contest.

Deposit required. SEC. 869. The superintendent shall require a deposit of eight dollars from each party for each day he shall be so engaged in taking evidence on said contest. Upon the final determination of the adjudication of the matters by the board of control, an order shall be entered directing that the money so deposited shall be refunded to the persons, associations, or corporations in whose favor such contest shall be determined, and that all moneys deposited by other parties therein shall be turned over by the superintendent to the State treasury to the credit of the fund provided for the maintenance of the board of control.

Evidence transmitted. SEC. 870. Upon the completion of the evidence in the original hearing before the superintendent, and the evidence taken in all contests, it shall be his duty to transmit all the evidence and testimony in said adjudication to the office of the board of control in person, or by registered mail.

Measurement of streams and ditches. SEC. 871. It shall be the duty of the State engineer, or some qualified assistant, to proceed at the time specified in the notice to the parties on said stream to be adjudicated, to make an examination of said stream and the works diverting water therefrom, said examination to include the measurement of the discharge of said stream and of the carrying capacity of the various ditches and canals diverting water therefrom, an examination of the irrigated lands, and an approximate measurement of the lands irrigated or susceptible of irrigation from the various ditches and canals; which said observation and measurements shall be reduced to writing and made a matter of record in his office, and it shall be the duty of the State engineer to make or cause to be made a map or plat on a scale of not less than one inch to the mile, showing with substantial accuracy the course of said stream, the location of each ditch or canal diverting water therefrom, and the legal subdivisions of lands which have been irrigated or which are susceptible of irrigation from the ditches and canals already constructed.

Order determining priorities. SEC. 872. At the first regular meeting of the board of control after the completion of such measurement by the State engineer, and the return of said evidence by said division superintendent, it shall be the duty of the board of control to make, and cause to be entered of record in its office, an order determining and establishing the several priorities of right to the use of waters of said stream, and the amounts of appropriations of the several persons claiming water from such stream, and the character and kind of use for which said appropriation shall be found to have been made. Each appropriation shall be determined in its priority and amount by the time by which it shall have been made and the amount of water which shall have been applied for beneficial purposes: *Provided*, That such appropriator shall at no time be entitled to the use of more water than he can make a beneficial application of on the lands for the benefit of which the appropriation may have been secured, and the amount of any appropriation made by reason of an enlargement of distributing works shall be determined in like manner: *Provided*, That no allotment shall exceed one cubic foot per second for each seventy acres of land for which said appropriation shall be made.

Certificate of appropriation.

SEC. 873. As soon as practicable after the determination of the priorities of appropriation of the use of waters of any stream, it shall be the duty of the secretary to issue to each person, association, or corporation represented in such determination a certificate to be signed by the State engineer, as president of the board of control, and attested under seal by the secretary of said board, setting forth the name and post-office address of the appropriator; the priority number of such appropriations; the amount of water appropriated; and if such appropriation be for irrigation, a description of the legal subdivisions of land to which said water is to be applied. Such certificate shall be transmitted by said State engineer, or by a member of the board of control, in person or by registered mail, to the county clerk of the county in which such appropriation shall have been made, and it shall be the duty of the county clerk upon the receipt of the recording fee, which fee shall be seventy-five cents, to record the same in a book especially prepared and kept for that purpose, and thereupon immediately transmit the same to the respective appropriators. Said recording fee of seventy-five cents shall be paid to the division superintendent at the time of the submission of testimony and proof of appropriation of water by each such appropriator or claimant before the said division superintendent as provided by law, and shall be by him or the State engineer transmitted with each certificate of appropriation to the county clerk of the county in which said certificate is to be recorded and his receipt taken therefor, which said receipt shall be filed in the State engineer's office.

Appeal from board allowed.

SEC. 874. Any party or number of parties acting jointly who may feel themselves aggrieved by the determination of the board of control may have an appeal from the board of control to the district court of the judicial district within which the appropriation or appropriations of the party or parties so aggrieved may be situated. All persons joining in the appeal shall be joined as appellants, and all persons having interests adverse to the parties appealing, or either of them, shall be joined as appellees.

Proceedings on appeal.

SEC. 875. The party or parties appealing shall, within sixty days of the determination of the board of control, which is appealed from and the entry thereof in the records of the board, file in the district court to which the appeal is taken a notice in writing stating that such party or parties appeals to such district court from the determination and order of the board of control; and upon the filing of such notice, the appeal shall be deemed to have been taken: *Provided, however,* That the party or parties appealing shall, within the sixty days mentioned, enter into an undertaking, to be approved by the district court or judge thereof, and to be given to all the parties in the said suit or proceeding other than the parties appealing, and to be in such an amount as the court or judge thereof shall fix, conditioned that the parties giving their said undertaking shall prosecute their appeal to effect, and without unnecessary delay, and will pay all costs and damages which the party to whom the undertaking is given, or either, or any of them, may sustain in consequence of such appeal.

Duty of clerk of court when appeal is perfected.

SEC. 876. The clerk of the district court shall, immediately upon filing of said notice of appeal and the approval of the bond mentioned in the preceding section, transmit to the secretary of the board of control a notice over the seal of the court to the effect that said appeal has been perfected, which notice shall be entered of record by the secretary in the records of the board of control, and the appellant or appellants cause a certified copy thereof to be served on each of the appellees, serving the same in the manner provided for the serving of a summons in the district court.

Transcript to be filed.

SEC. 877. The appellant or appellants shall, within six months after the appeal, as provided for, is perfected, file in the office of the clerk of the district court a certified transcript of the order of determination made by the board of control, and which is appealed from, a certified copy of all the records of the board of control relating to such determination, and a certified copy of all the evidence offered before the board of control, including the measurements of streams, tributaries, and ditches provided for by section eight hundred and seventy-one, together with the petition setting out the cause of complaint of the party or parties appealing, to which petition all parties joined as appellees shall be served with notice by the issuance of summons out of the office of the clerk of the district court, within the time and in the manner provided by law for the issuance and service of summons in actions of law.

Practice on appeal.

SEC. 878. All proceedings of appeal shall be conducted according to the provisions of the civil code of procedure and the practice of appeals from the district courts of the State to the supreme court: *Provided*, That the practice on appeal in the district court, as to pleadings necessary to be filed and the admission of evidence upon trial, shall be the same as is now or may hereafter be provided for by law regulating appeals from the justice court.

Clerk shall transmit transcript to clerk of board.

SEC. 879. It shall be the duty of the clerk of the district court immediately upon the entry of any judgment, order, or decree by the district court or by the judge thereof, in an appeal from the decision of the board of control, to transmit a certified copy of said judgment, order, or decree to the secretary of the State board of control. It shall be the duty of the secretary to immediately enter the same upon the records of such office, and the State engineer shall forthwith issue to the superintendent or superintendents of water divisions instructions in compliance with the said judgment, order, or decree, and in execution thereof.

Costs.

SEC. 880. All costs made and accruing by reason of such appeal shall be adjudged to be paid by the party or parties against whom such appeal shall be finally determined. During the time an appeal from the order of the board of control is pending in the district court, and until a certified copy of the judgment, order, or decree of the district court is transmitted to the State engineer, the division of water from the stream involved in such appeal shall be made in accordance with the order of the board of control.

Stay bond.

SEC. 881. Any time after the appeal has been perfected the appellant or appellants may stay the operation of said decree appealed from by filing a bond in the district court wherein such appeal is pending in such amount as the judge thereof may designate, conditioned that he will pay all damages that may accrue to the appellee or appellees by reason of such order or decree not being enforced, should the proceedings and appeal be decided against the appellant. And immediately upon the filing and approving of such bond to stay the operations of the decree, the clerk of the district court shall transmit to the board of control a notice, over the seal of the court, to the effect that such bond has been filed and that the operations of such decree are stayed during the pendency of such appeal proceedings. This notice shall be recorded in the records of the board of control, and the State engineer shall immediately give proper notice to the superintendent of the water division wherein such appeal may have been taken.

Appeals to be advanced on docket.

SEC. 882. Upon any appeal being taken, as is by this chapter provided, from the board of control to the district court of this State it shall be the duty of said court to advance said appeal to the head of its trial docket, and to give such appeal precedence over all civil causes in hearing and determination thereof, and if an appeal be taken from the judgment or the decree of the district court in any appeal in this

chapter provided for to the supreme court of the State, it shall in like manner be the duty of the supreme court to advance such appeal to the head of its docket for the trial of civil causes, and give it like precedence as to trial.

Rehearing. SEC. 883. After any final order of the board of control adjudicating the priorities upon any stream, any party interested therein may within one year thereafter apply for a rehearing for reasons to be stated in the application; and upon the filing of such application the secretary of the board shall mail written notice thereof to every other party interested, and therein fixing and stating a time when said application will be heard.

Authority to modify order and correct testimony. SEC. 884. Upon such hearing the board shall have authority to modify or alter the original order in such respect as shall appear just and proper; but it shall not be necessary for an application for a rehearing to be filed to entitle any party to an appeal. Upon such hearing the board shall also have the authority to permit, upon good cause shown, the correction of the testimony of any party or witness if it shall appear that a mistake has occurred therein, but no other new evidence shall be received at such hearing unless it shall be shown to the satisfaction of the board that the same is material and has been discovered since the taking of the original testimony and could not with reasonable diligence have been discovered before that time.

Authorized to administer oaths. SEC. 885. The members of the board of control shall be authorized to administer oaths in all cases where it shall be necessary in the performance of their official duties.

Who to be notified. SEC. 886. In issuing notices to claimants in priority adjudications of the waters of any stream and its tributaries, as provided in this chapter, all parties named in claiming the waters of said stream or tributaries in said transcript shall be notified by mail.

Fees. SEC. 887. The secretary of the board shall collect the following fees, which shall be paid in advance, and paid to the State treasurer, and by him credited to the per diem fund of the board of control: For making certified transcripts of the records of the board of control or of papers or documents filed with said board, one dollar for the first folio, and for each subsequent folio fifteen cents; for attaching certificate and seal of the board to each transcript, one dollar.

WATER COMMISSIONERS.

Districts. SEC. 888. The board of control shall divide the State into water districts, said water districts to be so constituted as to secure the best protection to the claimants for water and the most economical supervision on the part of the State; said water districts shall not be created until a necessity therefor shall arise, but shall be created from time to time as the appropriations and priorities thereof from the streams of the State shall be adjudicated.

Commissioner, how appointed—Term. SEC. 889. For each water district there shall be appointed one commissioner who shall be a resident of the district in which he is to serve, and who shall be appointed by the governor, to be selected by him from persons recommended to him by the superintendent of the water division in which such water district is situated. Each commissioner shall hold his office two years, and until his successor is appointed and qualified, and the governor shall, by like selection and appointment, fill all vacancies which may occur in the office of water commissioner, and may at any time remove any water commissioner for failure to perform his duties as such water commissioner, upon complaint in that respect being made to him in writing.

Duties. SEC. 890. It shall be the duty of said water commissioner to divide the water in the natural stream or streams of his district among the several

ditches taking water therefrom, according to the prior rights of each, respectively, in whole or in part, and to shut and fasten, or cause to be shut and fastened, under the direction of the superintendent of his water division, the headgates of ditches heading in any of the natural streams of the district when, in times of scarcity of water, it is necessary to do so by reason of the priority of rights of others taking water from the same stream or its tributaries.

Water commissioner to prevent waste of water. SEC. 891. Said water commissioner shall so divide, regulate, and control the use of the water of all streams within their respective districts in such manner, as near as may be, as will prevent unnecessary waste of water, and to that end such commissioner shall so shut and fasten the headgate or gates of all ditches so that no more water will flow into said ditch than is actually required and will be used for the uses and purposes for which such water was appropriated, and any person who may be injured by the action of the water commissioner, or by his failure to act pursuant to this chapter, may resort to any court of competent jurisdiction for such relief as he may be entitled to.

Pay of. SEC. 892. Water commissioners herein provided for shall each be entitled to pay at the rate of five dollars per day for each day he shall be actively employed in the duties of his office, to be paid by the county in which the work is performed. Each water commissioner shall keep a true and just account of the time spent by him in the duties of his office and the time spent by him in the performance of his duties in each county, respectively, into which his water district may extend, and shall present a true copy thereof, verified by oath, to the board of county commissioners of the county in which the work may have been done. And the said board of county commissioners shall, upon approval thereof by the superintendent of the water division, allow the same.

Assistants. SEC. 893. Said water commissioner shall have power in case of emergency to employ suitable assistants to aid him in the discharge of his duties. Such assistants shall take the same oath as the water commissioner, and shall obey his instructions, and each shall be entitled to four dollars per day for every day he is employed, not to exceed thirty-five days in each year, to be paid upon certificates of the division superintendent, in the same manner as provided for the payment of the water commissioners.

When to begin work. SEC. 894. Said water commissioners shall not begin their work until they have been called upon by two or more owners or managers of ditches, or persons controlling ditches in the several districts, by application in writing, stating that there is a necessity for the use of water; and they shall not continue performing services after the necessity therefor shall cease.

Limitation on the use of water. SEC. 895. The priority of right to the use of water shall be limited and restricted to so much thereof as may be necessarily used and appropriated for irrigation or other beneficial purposes as aforesaid, irrespective of the carrying capacity of the ditch, and all the balance of the water not so appropriated shall be allowed to run in the natural stream from which such ditch draws its supply of water, and shall not be considered as having been appropriated thereby; and in case the owner or owners of any such ditch, canal, or reservoir shall fail to use the water therefrom for irrigation or other beneficial purposes, or shall refuse to furnish any surplus water to the owner or owners of lands lying under such ditch as hereinafter provided, during any two successive years, they shall be considered as having abandoned the same, and shall forfeit all water rights, easements, and privileges appurtenant thereto, and the waters formerly appropriated by them may be again appropriated for irrigation and other beneficial purposes, the same as if such ditch, canal, or reservoir had never been constructed; neither shall the owner or owners of any such ditch, canal, or reservoir have any right to receive from others any royalty for the use of the water

carried thereby, but every such owner or owners having a surplus supply of water, and furnishing the same to others from any ditch, canal, or reservoir as hereinafter provided, shall be considered common carriers and shall be subject to the same laws that govern common carriers.

County commissioners shall regulate the sale of surplus water.

SEC. 896. The owner or owners of any ditch which carries a greater quantity of water than the owner or owners thereof necessarily use for irrigation or other beneficial purposes in connection with their own lands shall, when application is made to them for that purpose, furnish such surplus water at reasonable rates to the owners of lands lying under any such ditch for the purpose of reclaiming such lands and rendering the same productive; and in case of refusal so to do, the owner or owners of any such ditch may be compelled by injunction suit to furnish such water on such terms as to the court may seem meet and proper: *Provided*, That the board of county commissioners in their respective counties shall have power, when application is made to them by either party interested, to establish reasonable maximum rates to be charged for the use of water, whether furnished by individuals or corporations.

When land owner entitled to right of way—Damages.

SEC. 897. When any person owning claims in such locality has not sufficient length of area exposed to said streams to obtain a sufficient fall of water to irrigate his land or his farm, or land used by him for agricultural purposes is too far removed from said stream, and he has no water facilities on those lands, he shall be entitled to a right of way through the farms or tracts of land which lie between him and said stream, or the farms or tracts of land which lie above and below him on said stream for the purposes hereinbefore stated: *Provided*, That in the construction, keeping up, and using any such ditch through the lands of another person, the person or persons constructing or using said ditch, or whose duty it shall be to keep the same in repair, shall be liable to the person owning or claiming such land for all damages accruing to such person by reason of said construction, keeping up, and using such ditch.

Extent of right of way.

SEC. 898. Such right of way shall extend only to a ditch, dyke, or cutting, sufficient for the purposes required.

Petition to commissioners—Notice of appointing appraisers.

SEC. 899. Upon the refusal of owners of tracts of land, or lands, through which said ditch is proposed to run to allow of its passage through their property, the persons desiring to open such ditch may present to the county commissioners of the county in which said lands are located a petition signed by the person or persons, describing, with convenient accuracy, the lands so desired to be taken as aforesaid, setting forth the name or names of the owner or other person interested, and praying the appointment of three appraisers to ascertain the compensation to be made to such owner or persons interested. Upon the receipt of said petition, the said county commissioners shall give notice, at least thirty days prior to the appointment of the said appraisers, by public notice in a newspaper, when published in the county, or by posting three or more notices in three different places in said county, stating that such appraisers will be appointed on the — day of —.

Proceedings of appraisers—Payment of assessment.

SEC. 900. The said appraisers, before entering upon the duties of their office, shall take an oath to faithfully and impartially discharge their duties as said appraisers. They shall hear the proofs and allegations of the parties, and any two of them, after reviewing the premises, shall, without fear, favor, or partiality, ascertain and certify the compensation proper to be made to said owner, or persons interested, for the lands to be taken or affected, as well as all damages accruing to the owner or person interested in consequence of the condemnation

of the same, taken or injuriously affected as aforesaid, making such deduction allowance for real benefits or advantages as such owner or parties interested may derive from the construction of any such ditch or flume. They, or a majority of them, shall subscribe a certificate of their said ascertainment and assessment, which shall be recorded in the county clerk's office of the county in which said lands are situated, and upon the payment of the compensation (if any), the said person or persons shall have the right of way to construct said ditch or flume.

Ditches to be kept in repair.

SEC. 901. The owner or owners of any ditch for irrigation or other purposes shall carefully maintain the embankment thereof, so that the waters of such ditch may not flood or damage the premises of others.

Vested rights preserved.

SEC. 902. Nothing in this chapter contained shall be so construed as to impair the prior vested rights of any mill or ditch owner, or other person, to the use of any such water course.

When commissioners to bridge ditches—expenses.

SEC. 903. When any such ditch or water course shall be constructed across any public traveled road, and not bridged within three days thereafter, it shall be the duty of the county commissioner of the county in which said ditch and road are located to put a bridge over said ditch or water course, and call upon the owner or owners of said ditch or water course to pay the expenses of constructing said bridge, and if payment thereof be refused, a civil action may be maintained for the recovery of the same, together with all accruing costs.

Claim for right of way may be arbitrated.

SEC. 904. Upon the refusal of the owner or owners of land or lands through which any person or persons are desirous of constructing any irrigation ditch or ditches, then it shall be lawful for the parties interested to settle the matter by the appointment of a board of arbitration consisting of three men, as hereinafter provided.

Appointment and proceedings of arbitrators.

SEC. 905. The creation of the board of arbitration shall be as follows: The person or persons desiring the construction of such ditch or ditches, and the owner or owners of the land or lands through which the construction of such ditch or ditches is contemplated, shall each choose one disinterested resident property holder of the county in which the land or lands mentioned above are situated, and the two so chosen shall designate a third person with like qualifications as themselves, and it shall be lawful for these persons to immediately proceed to hear the proof and allegations of the parties concerned. It shall be lawful for any two of such board of arbitration to make such assessment of damages as may in their judgment be deemed just and right, taking into consideration the benefits, if any, that may accrue to the owner or owners of the land or lands through which the construction of such ditch or ditches is contemplated.

Appeal to commissioners.

SEC. 906. Should the verdict or assessment of such board of arbitration be unsatisfactory to either or both of the parties interested, then recourse may be had by an appeal made in writing, within ten days from the rendering of such verdict by such board of arbitration, addressed to the board of county commissioners of the county in which the contestants reside; in which case the party taking the appeal shall give bonds for all costs; then the case shall stand as though no action had been taken in the matter, and the parties may then proceed under this chapter in the same manner as though the proceedings to ascertain the compensation to be given had been taken before the county commissioners in the first instance.

If no appeal is taken, award is final.

SEC. 907. In case no appeal be taken as above provided by either of the parties interested, then the finding of such board of arbitration shall be binding

and final: *Provided*, The sum of money agreed upon by the board of arbitration has been tendered or paid, or a deed for such right of way executed and delivered or tendered by the party or parties over whose land the right of way is sought.

PARTNERSHIP DITCHES.

District court may appoint person to distribute water.

SEC. 908. Whenever two or more persons, joint owners in an irrigation ditch, their lessee or lessees, are unable to agree relative to the division or distribution of water received through such ditch, it shall be lawful for any such owner or owners, his or their lessee or lessees, or either of them, to apply to the district court of the district in which such ditch shall be located, by a verified petition setting forth such fact, asking for an order appointing some suitable person to take charge of such ditch for the purpose of making a just distribution of the water through the same, to the several owners or parties entitled to the use of the waters received through such ditch.

Clerk shall issue summons, when.

SEC. 909. The petition mentioned in the preceding section shall be filed with the clerk of the district court of the county in which such ditch shall be located, or a portion thereof, and upon the filing of such petition it shall be the duty of said clerk to immediately issue summons as in other cases, notifying the owner or owners, lessee or lessees of such ditch other than those filing such petition, and requiring them to appear within five days from the date of the issuance of such summons, and to make answer to such petition: *Provided, however*, That such summons shall be served at least two days before the date fixed therein for the answer.

Hearing.

SEC. 910. The hearing provided for under this chapter may be heard either before the court, the judge thereof sitting in chambers, or the district court commissioner of said county, and shall be had upon the day fixed in the summons for making answer to the petition filed, or as soon thereafter as possible, and the decision of the court, judge, or commissioner shall be final.

Duties of person appointed.

SEC. 911. Upon it being made to appear to the satisfaction of the court, judge, or commissioner hearing such application, that the protection of the rights to the use of the water in said ditch of the applicant or applicants requires the issuance of such order, he shall appoint some suitable person, not having a personal interest in such ditch, to divide and distribute the waters received through such ditch as in his judgment justice may require, in accordance to the rights of the several owners, or their lessee or lessees. The person so appointed shall have exclusive control of such ditch for the purposes of dividing and distributing the water received into the same until such time as he may be removed by the order of the proper court, judge, or commissioner.

Statement required.

SEC. 912. The person so appointed shall render to the court, judge, or commissioner appointing him, monthly, or oftener if required, a full and itemized statement of the services rendered by him, and the expenses, if any, incurred by him in the discharge of his duty, and upon the approval of such account or accounts, judgment shall be rendered at the next term of said court for any unpaid balance thereon against the several owners of such ditch who refuse or neglect to pay their pro rata share of such expense in favor of such person so as aforesaid appointed.

Compensation.

SEC. 913. The person appointed as hereinbefore provided shall receive as compensation for his services the sum of three dollars per day for each day or part of a day in excess of a half day, actually and necessarily spent in the performance of the duties of his office, together with actual expenses; and as security for the payment of his services and expenses as may be allowed, he may file in the office of the county clerk of the county wherein said ditch is located, the itemized account or accounts when allowed as above, provided it be accompanied

with an affidavit as to the amount unpaid thereon, and when so filed it shall constitute a valid lien against the interest in said ditch of the owner in default of payment, which may be enforced in the same manner as provided by law for the enforcement of mechanics' and builders' liens.

Fees. SEC. 914. The fees of the clerk, of the sheriff and commissioner, shall be the same as those allowed for similar services in other cases, and shall in the first instance be paid by the party or parties applying for the service, but ultimately as may by the court, judge, or district court commissioner be apportioned, for which judgment shall be so rendered.

Majority of owners may maintain ditch. SEC. 915. In all cases where irrigation ditches are owned by two or more persons, and one or more of such persons shall fail or neglect to do his, her, or their proportionate share of the work necessary for the proper maintenance and operation of such ditch or ditches, such other owner or owners, being a majority of the owners of such ditch, desiring the performance of such work, may, after having given ten days' written notice to such owner or owners who have so failed to perform their proportionate share of such work necessary for the operation and maintenance of said ditch or ditches, perform such labor and recover therefor from such person or persons so failing to perform his, her, or their share of such work in any competent court having jurisdiction of the subject-matter, the expense or value of such work or labor so performed.

Lien for work performed on ditch.

SEC. 916. Upon the failure of any coowner to pay his proportionate share of such expense, as mentioned in the preceding section, within thirty days after receiving a statement of the same as performed by his coowner or owners, such person or persons so performing such labor may secure payment of said claim by filing an itemized and sworn statement thereof, setting forth the date of the performance and the nature of the labor so performed with the county clerk of the county wherein said ditch is situated, and when so filed it shall constitute a valid lien against the interest of such person or persons who shall fail to perform their proportionate share of the work requisite to the proper maintenance of said ditch, which said lien when so taken may be enforced in the same manner as provided by law for the enforcement of mechanics' and builders' lien.

PROCEDURE RELATIVE TO THE APPROPRIATION OF WATER.

Application. SEC. 917. Any person, association, or corporation hereafter intending to acquire the right to the beneficial use of the public water of the State of Wyoming shall, before commencing the construction, enlargement, or extension of any ditch, canal, or other distributing works, or performing any work in connection with said construction, or proposed appropriation, make an application to the State engineer for a permit to make such appropriation. Such application must set forth the name and post-office address of the applicant, the source of the water supply, the nature of the proposed use, the location and description of the proposed ditch, canal, or other work, the time within which it is proposed to begin construction, the time required for the completion of construction, and the time required for the complete application of the water to the proposed use.

Duty of State engineer. SEC. 918. In case the proposed right of use is for agricultural purposes, the application shall give the legal subdivisions of land proposed to be irrigated, with the total acreage to be reclaimed, as near as may be. On receipt of this application, which shall be of a form prescribed by the State engineer, it shall be the duty of that officer to make an endorsement thereon of the date of its receipt, and to make a record of such receipt in some suitable book in his office. It shall be his duty to examine said application and ascertain if it sets forth all the facts necessary to show the location, nature, and amount of

proposed use. If, upon such examination, the application is found defective, it shall be the duty of the State engineer to return the same for correction. The date of such return, with the reasons therefor, shall be endorsed on the application and a record made thereof in the book kept for recording receipts of such applications. A like record shall be kept of the date of the return of corrected applications and of the date of the refusal and return of applications rejected.

Approval of application. SEC. 919. All applications which shall comply with the provisions of this chapter and with the regulations of the engineer's office shall be recorded in a suitable book kept for that purpose, and it shall be the duty of the State engineer to approve all applications made in proper form which contemplate the application of the water to a beneficial use and where the proposed use does not tend to impair the value of existing rights or be otherwise detrimental to the public welfare; but where there is no unappropriated water in the proposed source of supply, or where the proposed use conflicts with existing rights, or threatens to prove detrimental to the public interest, it shall be the duty of the State engineer to reject such application and refuse to issue the permit asked for.

Application, how endorsed. SEC. 920. The refusal or approval of an application shall be endorsed thereon and a record made of such endorsement in the State engineer's office. The application so endorsed shall be returned to the applicant. If approved, the applicant shall be authorized, on receipt thereof, to proceed with the construction of the necessary works, and to take all steps required to apply the water to a beneficial use, and to perfect the proposed appropriation. If the application is refused, the applicant shall take no steps towards the prosecution of the proposed work or the diversion and use of the public water so long as such refusal shall continue in force.

Additional information. SEC. 921. Before either approving or rejecting an application, the State engineer may require such additional information as will enable him to properly guard the public interests, and may, in the case of applications proposing to divert more than twenty-five cubic feet of water per second of time, or to reclaim over one thousand acres of land, require a statement of the following facts: In case of incorporated companies, he may require the submission of the articles of incorporation, the names and the places of residence of its directors and officers, and the amount of its authorized and of its paid-up capital. If the applicant is not an incorporated company, he may require a showing as to the name or names of the party or parties proposing to construct the work, and a showing of facts necessary to enable him to determine whether or not they have the financial ability to carry out the proposed work, and whether or not the said application has been made in good faith.

Limitation on time of completing work. SEC. 922. In his endorsement of approval on any application the State engineer shall require that actual construction work shall begin within one year from the date of such approval, and that the construction of any proposed irrigation work shall be completed within a period of five years from the date of such approval. He may limit the applicant to a less period of time for the completion of work than is asked for, and likewise the perfecting of the proposed right for a less period than named in the application. The State engineer shall have authority, for good cause shown, to extend the time within which irrigation or other works shall be completed under any permit therefor issued by said engineer.

Appeals. SEC. 923. Any applicant feeling himself aggrieved by the endorsement made by the State engineer upon his application may, in writing in an informal manner and without pleadings of any character, appeal to the board of control for an examination and reversal of the endorsement of the State engineer; and if he shall deem himself aggrieved by the order made by the board of control with reference to his application, he may take an appeal therefrom to the district court of

the county in which the point of diversion of the proposed appropriation shall be situated. Such appeal shall be taken within sixty days from the issuance of the order by the board of control, and shall be perfected when the applicant shall have filed in the office of the clerk of such district court a copy of the order appealed from, certified by the secretary of the board of control as a true copy, together with the petition to such court setting forth the appellant's reason for appeal, and such appeal shall be heard and determined upon such competent proof as shall be adduced by the applicant and such like proofs as shall be adduced by the board of control, or some person duly authorized in its behalf.

Maps to be filed. SEC. 924. Each application for permit to appropriate water for beneficial uses must be accompanied by a map or plat in duplicate, showing accurately the location and extent of the proposed work. These maps or plats must be drawn on tracing linen, on a scale not less than two inches to the mile; they must show the location of the head gate or point of diversion by courses and distances from some Government corner; they must show the actual location of the ditch or canal, or water line of the reservoir, and must show, wherever section lines are crossed, the distance to the nearest Government corner. The map or plat must show the course of the river, stream, or other source of supply, the location and area of all lands proposed to be reclaimed, the position and area of all reservoirs or basins intended to be created for the purpose of storing water; the location of the intersection with all other ditches, canals, laterals, or reservoirs which are caused by this work, or with which connections are made; but all streams and all intersecting ditches, canals, and reservoirs not connected with the proposed work must be represented in ink of different color from that used to represent the proposed work. These maps must contain the name of the proposed work, and where possible the number of the permit. They must, in addition, have the name or names of the applicant or applicants, and a certificate of the surveyor, giving the date of survey, his name, and post-office address.

Engineer must examine maps. SEC. 925. It shall be the duty of the State engineer to examine these maps or plats and to ascertain if they agree with the description contained in the application, and when found to agree, or made to agree, to approve the same, file one copy in his office, and return the other, approved, to the party filing them.

Additional description. SEC. 926. In case of ditches or canals carrying more than fifty cubic feet of water per second the engineer may require, in addition to the maps or plats above described, the following: A longitudinal profile of the ditch showing the bottom and proposed water line; the horizontal scale of this line shall not be less than one inch to one thousand feet, and the vertical scale not less than one inch to twenty feet.

Plans. SEC. 927. The engineer may require, in addition to the maps or plats above described, a plan showing cross sections at a sufficient number of points to show all the different forms which the ditch, when completed, will take, and showing what proportion of the water is to be conveyed in excavation and what proportion to be conveyed in fill. These plans shall be drawn on a horizontal and vertical scale of one inch to twenty feet. Plans of any dams, cribs, embankments, or other proposed works to obstruct any river, stream, lake, or pond, or other source of water supply, shall be drawn on a longitudinal scale of not less than one inch to two hundred feet, and for cross sections on a scale of not less than one inch to twenty feet; and shall show what material is intended to be used and placed in such work. Timber, brush, stone, or other material except earth used in such works shall be shown in detail on a plan, the scale of which shall not be less than one inch to four feet. The maps of all proposed reservoirs shall show the surface of the ground under water, and a sufficient number of lines of level shall be shown so that the contents of the reservoir or basin may be accurately determined. If the

levels shall be shown by contour lines they shall be on a scale sufficiently large to show vertical levels not exceeding five feet, and with all such reservoir plans there shall be furnished a plan, on a scale of not less than one inch to four feet, showing the method of providing a waste way for such reservoir, and method of drawing off the water from such reservoir or basin.

Certificate to appropriator. SEC. 928. Upon it being made to appear to the satisfaction of the board of control that any appropriation has been perfected in accordance with such application, and the endorsement thereon by the State engineer, it shall be the duty of the board of control, by the hand of its president, attested under the seal of the secretary, to send to the county clerk a certificate of the same character as that described in section eight hundred and seventy-three, which said certificate shall be recorded in the office of the county clerk as provided in said section.

Date of priority. SEC. 929. The priority of such appropriation shall date from the filing of the application in the engineer's office.

Appropriator shall maintain headgate. SEC. 930. The appropriator of any of the public waters of the State shall maintain, to the satisfaction of the division superintendent of the district in which the appropriation is made, a substantial headgate at the point where the water is diverted, which shall be of such construction that it can be locked and kept closed by the water commissioner; and such appropriator shall construct and maintain, when required by the division superintendent, a flume or measuring device, as near the head of such ditch as is practicable, for the purpose of assisting the water commissioner in determining the amount of water that may be diverted into said ditch from the stream. If any owner or appropriator of public waters that have been adjudicated upon should refuse or neglect to put in such headgate or measuring device, after thirty days' notice to do so by the division superintendent, the said superintendent may notify the county commissioners of the county where such headgate, flume, or measuring device is situated; and it shall be the duty of said county commissioners, when so notified by said division superintendent, to put in such headgate, flume, or measuring device at the expense of the county where the expense is incurred, and present a bill of costs to the owner, or owners, of the ditch; and if such owner or owners shall refuse or neglect, for three days after the presentation of such bill of costs, to pay the same, the said costs shall be made a charge upon the said ditch, and shall be collected as delinquent taxes, and be subject to the same conditions and penalties as other delinquent taxes, and until the full and complete payment of such bill of costs it shall be the duty of the water commissioner of the district in which such ditch is situated to close and keep closed the headgate of such ditch, and to take such needful steps as will prevent any water from being diverted therein from the source of supply.

Dams, plans of. SEC. 931. Duplicate plans for any dam across the channel of a running stream, above five feet in height, or of any other dam intended to retain water, above ten feet in height, shall be submitted to the State engineer for his approval, and it shall be unlawful to construct such dam until the said plans have been approved.

Engineer's authority to inspect. SEC. 932. The State engineer shall have authority to examine and inspect, during construction, any dam authorized under the provisions of this chapter, or any ditch, canal, or other work carrying over fifty cubic feet of water per second of time; and at the time of such inspection he may order the parties constructing such dam, or other works, to make any addition or alteration which he considers necessary for the security of the work or the safety of any person or persons residing on or owning land in the vicinity of such works.

Inspection, when desired.

SEC. 933. Should any person or persons residing on or owning land in the neighborhood of any irrigation works after completion, or in course of completion, apply to the State engineer in writing desiring an inspection of such works, the State engineer may order an inspection thereof. Before doing so he may require the applicant for such inspection to make a deposit of a sum of money sufficient to pay the expenses of an inspection, and in case the application appears to him not to have been justified, he may cause the whole or part of such expense to be paid out of such deposit. In case the application appears to the State engineer to have been justified, he may require the company to pay the whole or any part of the expenses of the inspection, and the same may be collected in the same manner as is provided for the collection of the expenses of constructing headgates and measuring flumes.

LANDS CONDITIONALLY CEDED TO THE STATE.

Water rights attach to land.

SEC. 955. The water rights to all lands acquired under the provisions of this chapter shall attach to and become appurtenant to the land as soon as title passes from the United States to the State.

SPECIAL PROVISIONS.

Legal standard.

SEC. 968. A cubic foot of water per second of time shall be the legal standard for the measurement of water in this State, both for the purpose of determining the flow of water in natural streams and for the purpose of distributing the water therefrom.

County to pay expense of printing.

SEC. 969. All bills for the printing of notices to claimants of water in the adjudications provided for in this title shall be paid for by the county in which the stream, the appropriation of whose waters shall have been so adjudicated, shall be situated, the said bills to be approved by the superintendent of the water division in which the adjudication is made.

Ditch owners to protect fish.

SEC. 970. It shall be the duty of every person, corporation, or company who shall construct, maintain, or operate any ditch or canal under the provisions of this title to construct and maintain, at the point and place where the water is diverted from its natural channel, some fit and proper obstruction whereby all fish will be prevented from entering said ditch or canal. Any person, company, or corporation violating the provisions of this section shall be adjudged guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not more than one hundred dollars, or by imprisonment in the county jail not less than ten days nor more than sixty days, or by both such fine and imprisonment.

Interference with head-gate, penalty.

SEC. 971. Any person who shall willfully open, close, change, or interfere with any headgate or water box without authority shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined a sum not exceeding one hundred dollars, or be imprisoned in the county jail for a term not to exceed six months, or both.

Power to arrest.

SEC. 972. The water commissioners, or their assistants, within their districts shall have power to arrest any person or persons offending, and turn them over to the sheriff of the proper county; and immediately upon delivering any such person so arrested into the custody of the sheriff, it shall be the duty of the water commissioner making such arrest to immediately, in writing and upon oath, make complaint before the proper justice of the peace against the person so arrested.

Destroying water improvements, penalty.

SEC. 973. Any person or persons who shall knowingly and willfully cut, dig, or break down, or open any gate, bank, embankment, or side of any ditch, canal, or reservoir, flume, tunnel, or feeder, in which such person or persons may be joint owners, or on the property of another, or in the lawful possession of another or others, and used for the purpose of irrigation, milling, manufacturing, mining, or domestic purposes, with intent maliciously to injure any person, association, or corporation, or for his or her own gain, unlawfully, with the intention of stealing, taking, or causing to run or pour out of such canal or reservoir, feeder, or flume any water for his or her own profit, benefit, or advantage, to the injury of any other person, persons, association, or corporation lawfully in the use of such water, or of such ditch, canal, tunnel, feeder, or flume, he, she, it, or they so offending shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined in any sum not exceeding one hundred dollars, and may be imprisoned in the county jail not exceeding six months, or both, in the discretion of the court.

Liability of owners of reservoirs.

SEC. 974. The owners of reservoirs shall be liable for all damage arising from leakage or overflow of the waters therefrom, or by floods caused by breaking of the embankments of such reservoir.

Fees of witnesses.

SEC. 975. Every witness who shall attend before the court, or the judge thereof in vacation, or before the person appointed to take testimony in the causes provided for in this title, under subpoena, by request of any party, shall be entitled to the same fees and mileage as witnesses in civil cases in the district court, and shall be paid by the party requiring his testimony.

Capital stock of ditch companies, assessable.

SEC. 976. Any ditch or irrigation company or association, all the property or capital stock of which is owned by farmers or others, owning lands under the line of such company's or association's ditch and receiving water therefrom, by reason of their being owners or stockholders in said company or association, shall have the right to levy and collect such annual assessments on the capital stock of said company, or members or owners of such association, whether said capital stock be fully paid up or otherwise, as may be deemed necessary by the trustees of said company, or a majority of the stock of such association, for the purpose of maintaining its ditches, flumes, tunnels, and the payment of all necessary expenses of such company: *Provided*, That this section shall only apply to such water companies or associations whose capital stock or ditch property is wholly owned by persons or corporations owning land under the line of their ditches, and using water therefrom by reason of being such stockholders in said companies: *And provided further*, That said company or association shall have the right to close the headgate and refuse water to all such stockholders, owners, or members who fail or refuse to pay said assessments after ten days' notice thereof, in writing, made by the president, agent, or attorney of said company or association.

Vested rights preserved.

SEC. 977. This title shall in no wise be construed as impairing or abridging any rights already vested in any person or persons, company or corporation, by virtue of the law heretofore in force.

Owner of canal must maintain bridge at road crossing.

SEC. 1959. Any person, company, corporation, or association of persons constructing, operating, or maintaining in whole, or in part, either as owner, agent, occupant, or appropriator, any ditch, canal, or water course, not being a natural stream, for irrigation or for any other and different purpose, shall put in, construct, maintain, and keep in repair at his, her, its, or their expense, where the same crosses any public highway or publicly traveled road, a good, substantial bridge, not less than fourteen feet in width, over such ditch, canal, or water course where it crosses such road. Any violation of the provisions of this section shall be

a misdemeanor, and, upon conviction thereof, the person so offending shall pay a fine in any sum not exceeding one hundred dollars for each day such ditch, canal, or water course shall be unbridged, insufficiently bridged, or permitted to remain out of repair.

GENERAL INCORPORATION LAWS.

Certificate of ditch company.

SEC. 3066. Whenever any three or more persons associate under the provisions of this chapter to form a company for the purpose of constructing a ditch or ditches for the purpose of conveying water to any mines, mills, or lands to be used for mining, milling, or irrigating of lands, they shall in their certificate, in addition to the matters required in section three thousand and twenty-nine, specify as follows: The stream or streams from which the water is to be taken out; the line of said ditch or ditches, as near as may be, and the use to which said water is intended to be applied.

Right of way for ditch company.

SEC. 3067. Any ditch company formed under the provisions of this chapter shall have the right of way over the lines named in the certificate, and shall also have the right to run the water of the stream or streams named in the certificate through their ditch or ditches: *Provided*, That the lines proposed shall not interfere with any other ditch whose rights are prior to those acquired under this chapter and by virtue of said certificate. Nor shall the water of any stream be directed from its original channel to the detriment of any miners, mill men, or others along the line of said stream, who may have a priority of right, and there shall be at all times left sufficient water in said stream for the use of miners and agriculturists who may have a prior right to such water along said stream.

Ditch company shall sell water.

SEC. 3068. Any company constructing a ditch or ditches under the provisions of this chapter shall furnish water to the class of persons using water in the way named in the certificate, as the way the water is designated to be used, whether miners, mill men, or farmers, whenever they shall have water in their ditch or ditches unsold, and shall at all times give the preference to the use of water in said ditch or ditches to the class of persons so named in the certificate, the rates at which water shall be furnished to be fixed by the county commissioners, as soon as such ditch or ditches shall be completed and prepared to furnish water.

Ditch to be kept in good condition.

SEC. 3069. Every ditch company organized under the provisions of this chapter shall be required to keep the banks of their ditch or ditches in good condition, so that the water shall not be allowed to escape from the same, to the injury of any mining claim, road, ditch, or other property located and held prior to the location of such ditch; and whenever it is necessary to convey any ditch over, or across, or above any lode or mining claim, the company shall, if necessary to keep the water of said ditch out from any claim, flume the ditch so far as necessary to protect such claim or property from the water of said ditch: *Provided*, That in all cases where the ditch has priority of right by location, the owners of such claim or property shall be compelled to protect themselves from any damages that might be created by said ditch, and the owner of such claim shall be liable for any damages resulting to said ditch by reason of the works or operations performed on such claim or property.

Ditch and water companies may issue bonds.

SEC. 3070. Every corporation organized under the laws of Wyoming for the purpose of constructing or operating a system of waterworks, within the corporate limits of any city or town; and every ditch and water company organized under the laws of Wyoming shall have power, and is hereby authorized to mortgage or execute deeds of trust, in whole or in part, of their real and personal property and

franchises, to secure money borrowed by them for the construction or operation of their waterworks or ditches, and may also issue their corporate bonds, to make all of said bonds payable to bearer or otherwise, negotiable by delivery, and bearing interest at such rates, and may sell the same at such rates and prices as they may deem proper; and said bonds shall be made payable at such times, and the principal and interest thereof may be made payable within or without this State, at such place or places as may be determined upon by said company.

Application of five preceding sections.

SEC. 3071. The five preceding sections shall apply to all ditch companies already formed and incorporated under the laws of Wyoming.

Condemnation proceedings by ditch, telegraph, and other companies.

SEC. 3084. (Gives ditch companies the right of eminent domain.)